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A TEXT-BOOK
OF
MUSICAL KNOWLEDGE.

PREPARATORY DIVISION.

Prepared for the Use of Students,

MORE ESPECIALLY FOR THE

LOCAL CENTRE EXAMINATIONS IN
THEORY OF MUSIC

OF

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PREFACE.

THIS little manual is primarily intended as a Text-book for the preparation of young candidates for the Preparatory Division of the Trinity College of Music Local Examinations in Theory of Music. It contains a complete course of instruction in all the subjects prescribed in the Preparatory Syllabus, together with useful hints for the successful working of Examination papers.

Every effort has been made to convey the instruction in the simplest and most interesting way possible; but it cannot be too strongly impressed upon teachers that an appeal to the children's ears through the medium of the pianoforte keyboard should be made, when any new thing is first brought under their notice.

Differences in pitch and of staff position of notes; transposition of notes to another octave; the influence of accidentals; the relative lengths of sounds; the uses of dots, ties, slurs, and staccato marks; the grouping of notes according to accent under various time-signatures; the position of the semitones in the major scales, etc., should all be amply illustrated upon the pianoforte —so that the young students may be able at once to appreciate the proper aural effects which are associated with the various aspects of musical notation. In every step of instruction given, the *ear* should be allowed to keep pace with the *eye*.

A companion book of Preparatory Questions and Exercises is published, in which the number of every *question* corresponds exactly with the number of that *paragraph* in the present Text-book, from which may be deduced the answer to the Question set. The two books when used together will thus present the instruction in the form of a **Catechism**—with this advantage over ordinary books of that kind, viz., that the questions and answers are not given together on the same page of the same book.

The author gratefully acknowledges the assistance kindly rendered him by his former pupil, Miss Emily R. Daymond, Mus.D., Oxon., who revised the proof sheets, and made many valuable suggestions thereon.

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A TEXT-BOOK
OF
MUSICAL KNOWLEDGE.

(Part I.)

PREPARATORY DIVISION.

⁂

CHAPTER I.

PITCH—THE MUSICAL ALPHABET—THE OCTAVE—THE GREAT STAFF—PIANO SCORE—"MIDDLE C."

1. When we listen to music, the first thing we notice is that the sounds we hear are **high, low,** or **medium.** Medium sounds are those produced from the *middle* of the piano keyboard ; sounds get lower as we go to the *left* of the keyboard, and higher as we go to the *right.*

2. We speak of these various effects of high, low, and medium sounds as **differences in pitch.** By **pitch** we mean the difference of height or depth in musical sounds.

3. In order that we may know one sound from another, different **letter-names** are given to sounds of different pitch.

When we began learning to read, we were first taught the names of the *letters* in the alphabet. Next, we were shown how the letters were grouped into *words.* Then, step by step, we were able to understand the meaning of the *sentences* formed by the words.

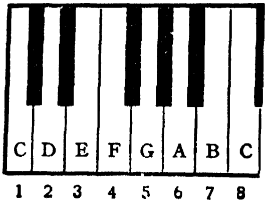
If we wish to be able to play or sing, or to read music "at first sight," we must, in the same way, begin at the very beginning, by learning the names of musical sounds.

4. The **Musical Alphabet is** a very short one. **There are** only **seven letter-names** in it—A, B, C, D, E, F, G.

5. These are all we want, because they are **repeated** over and over again.

6. Let us go to the piano and find out any place on the keyboard which is exactly like this :—

Fig. 1. **The Keyboard, "Scale of C."**



Let us strike the white key to the *left* of the two black ones (named " C " in Fig. 1), and let us go on playing the white keys in regular order, counting the first key we strike as *one* ; so—1, 2, 3, 4, 5, 6, 7, 8. Now we will *listen* to 8. Does not 8 sound to us exactly like 1, but *higher up ?* Now let us strike 1 and 8 together. Can we hear *two* sounds ? Yes, perhaps ; but the two together sound almost *like one single sound.* 1 and 8 together sound like 1, only 1 is *brighter* in " effect " when 8 is struck with it.

7. This eighth sound is called the **Octave of the first,** and we shall find, if we go on playing up and down the keyboard, that these same eight sounds shown in Fig. 1 come over and over again, the only difference being that they are higher up or lower down in pitch. The whole keyboard is like the portion of it shown in Fig. 1, *repeated over and over again.*

8. The eight *white* keys shown in Fig. 1 make what is called a **Scale.**

9. Now, leaving the keyboard for awhile, we have to see what musical sounds *look* like when they are written or printed in a music book. Musical sounds—or **tones,** as they are sometimes called—are expressed upon paper by **notes.** We *see* notes ; we *hear* tones.

10. Notes are written upon a **staff.**

11. The **staff** we have first to look at is called the **Great Staff.** It has **eleven lines** drawn across the paper, like the steps of a ladder.

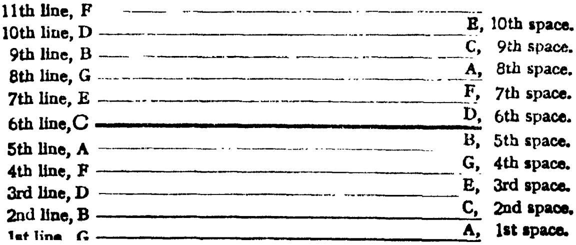
12. The lowest note is written at the bottom of the Great **staff**; the highest note is written at the top.

13. Each **line** of this "*Great* Staff" has its own **letter-name,** which never varies. Every note written upon a line of the Great Staff is called by the letter-name which belongs to that line.

14. Each **space** between the lines of the Great Staff has its own **letter-name,** which never varies. Every note written within a space of the Great Staff is called by the letter-name which belongs to that space.

15. Here is the **Great Staff,** showing the letter-name belonging to each of its eleven lines and to each of its ten spaces:—

Fig. 2. **The Great Staff.**



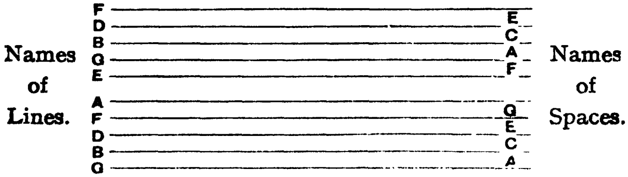
16. Notice that the lines and spaces are counted from the bottom upwards.

17. It will be better for us *not* to try and learn the letter-names of the Great Staff lines and spaces all at once. The best thing we can do now is to notice the **thick line** in the middle of the Great Staff, number 6, and learn the letter-name given to it, which is "**C.**" Any note written on this 6th line of the Great Staff is called **Middle C.**

18. **Middle C** is not only the name of the central line of the Great Staff, it is also the name of the Central C on the piano keyboard.

19. We should find it very hard to read music if the Great Staff were always used exactly as it is printed in Fig. 2. It would be very puzzling to the eye to single out a line or space from amongst so many. In writing or printing music for the piano, this thick Middle C line in the centre of the Great Staff is always left out.

Fig. 3. **The Great Staff, with Middle C left out.**



20. Ten lines remain—five at the top, five at the bottom.

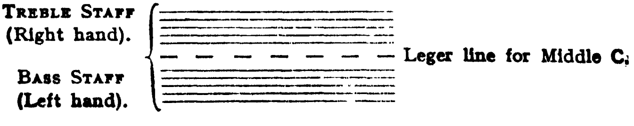
21. The five *upper* lines form a smaller staff by themselves, on which notes can be easily seen and recognised. This is called the **Treble Staff.** Upon it are written the notes to be played by the **Right Hand.**

22. The five *lower* lines form another smaller staff by themselves. This is called the **Bass Staff.** Upon it are written the notes to be played by the **Left Hand.**

23. The space between the Treble and Bass staves—now that the thick Middle C line has been left out—can be widened. The Treble and Bass staves, when joined together by a **brace** or bracket at the left-hand side, are called a **Piano Score,** because music intended to be played upon the piano is written in this way.

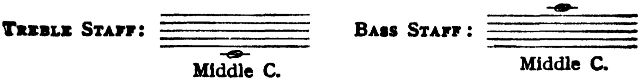
24. When the note called "Middle C" is wanted in the music, the middle C line is for the moment put back into the piano score—but only as a short or **leger line,** a tiny line just long enough for a single note to be written upon it, as shown here:—

Fig. 4. **Piano Score.**



25. When middle C has to be played by the *right* hand, it is written on a leger line just *below* the Treble staff ; when it has to be played by the *left* hand, it is written on a leger line just *above* the Bass staff.

Fig. 5. The leger-line position of Middle C.



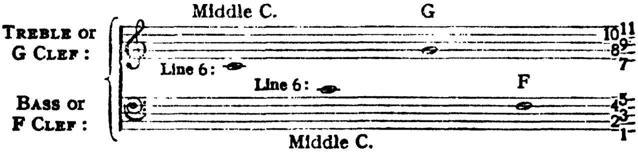
CHAPTER II.

THE TREBLE AND BASS CLEFS—POSITION OF THE NOTES C, G, F—HOW TO LEARN THE NAMES OF THE OTHER LINES AND SPACES OF PIANO SCORE.

26. In order that, when we look at a Piano Score, we may be able to know at once which is the Treble staff and which is the Bass staff, a sign called a **Clef** is placed at the beginning of each staff to show which is which.

Fig. 6 shows a Piano Score with its two staves, Treble and Bass, braced together. Each staff has its own proper clef, and the lines are numbered according to their position in the Great Staff.

Fig. 6. **The Treble and Bass Clefs.**



27. **A Clef** is a sign representing a certain letter-name, which it gives to the line it is placed upon.

28. In olden times the clef was an actual letter—the Treble clef was a real letter G ; the Bass clef was a real letter F.

29. Clefs are placed at the beginning of the two staves to remind us that the lines they are written upon bear the letter-names which the clefs stand for.

Until a clef is written upon a five-lined staff, no line or space of that staff has any name of its own.

30. If we compare Fig. 6 with Fig. 2, we shall see that in Fig. 6 the Bass clef is placed on the *fourth* line of the Great Staff, which in Fig. 2 is called F; and in Fig. 6 the Treble clef is placed on the *eighth* line of the Great Staff, which in Fig. 2 is called G. The eighth line of the Great Staff is the second line of the Treble staff, *counting upwards.*

31. We now know the names of three of the lines of the Great Staff: the middle line (6) is called C; the next line but one *above* it (8) is called G; and the next line but one *below* it (4) is called F.

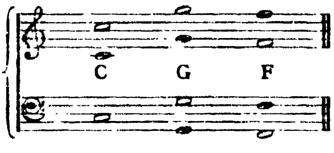
32. We also know where to find Middle C on the piano keyboard. The G pointed out by the Treble clef is the first G *above* Middle C, counting upwards. The F pointed out by the Bass clef is the first F *below* Middle C, counting downwards.

33. Now let us try and find out upon the piano score some **spaces**—as well as lines—which bear the names C, F, G. We shall see, as we go on, that if one note of an octave is on a line, the other note will be in a *space*; and if one note of an octave is in a space, the other note will be on a *line.*

34. There will be three lines and three spaces between the two notes which form an Octave, whether we count upwards or downwards.

35. Here are all the notes called C, F, G, which we are able to write on the piano score:—

Fig. 7. **Position of the notes C, F, G.**



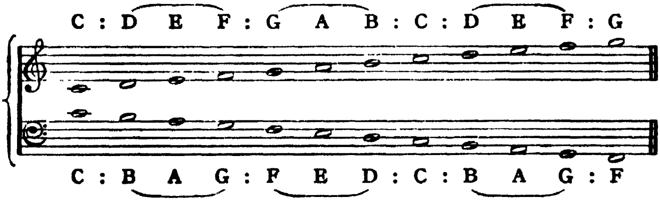
36. We see here that the third space, counting *upwards* from the bottom of the Treble staff, is called C—this is the octave *above* Middle C. We see, too, that the third space, counting *downwards* from the top of the Bass staff, is also called C—this is the octave *below* Middle C.

37. **We see in Fig. 7 that the note just** *above* **the** *top* **line** of the Treble staff is called G—a note which is an octave above the G named by the Treble clef; and that the note just *below* the bottom line of the Bass staff is called F—a note which is an octave below the note F named by the Bass clef.

38. The top space of the Bass staff is called G; the bottom space of the Treble clef is called F.

39. Now, let us write in piano score what is called the **Scale of C,** as we are taught to play it, **in contrary motion,** that is, with the right hand playing *up* the scale, while the left hand plays *down* the scale:—

Fig. 8. **The Scale of C.**


C : D E F : G A B : C : D E F : G
C : B A G : F E D : C : B A G : F

40. The first thing we notice about this is, that whilst the left hand plays notes which spell the word BAG, the right hand plays notes which spell the word FED *backwards* —thus, DEF; and whilst the left hand plays FED, the right hand plays BAG *backwards*—thus, GAB.

41. We may learn a great deal about the names of notes and their places in piano score by remembering the two little words BAG and FED.

42. Let us think of them in this order:—

{ D E F }
{ B A G }

43. Now, if we look at Fig. 8 we shall see that:—

{D is the note *below* the *Treble* staff.
{B is the note *above* the *Bass* staff.

{E is the note on the *bottom* line of the *Treble* staff.
{A is the note on the *top* line of the *Bass* staff.

{F is the note in the *bottom* space of the *Treble* staff.
{G is the note in the *top* space of the *Bass* staff.

44. If we look again at Fig. 8 we shall see, as we go *higher* up the Treble staff, and as we go *lower* down the Bass staff, these same letters come backwards, so :—

G A B
F E D

45. Thus :—

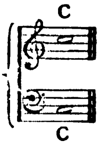
G is the second line of the Treble staff, counting ***up.***
F is the second line of the Bass staff, counting ***down.***

A is the second space of the Treble staff, counting ***up.***
E is the second space of the Bass staff, counting ***down.***

B is the third line of the Treble staff, counting *up.*
D is the third line of the Bass staff, counting *down.*

46. We have already learned that :—

C is the third space of the Treble staff, counting *up* :
C is the third space of the Bass staff, counting *down* :



47. Then, as we still go on, up and down, we come upon our six letters again, in the order in which we first found them :—

D E F
B A G

48. Thus :—

D is the fourth line of the Treble staff, counting ***up.***
B is the fourth line of the Bass staff, counting ***down.***

E is the fourth space of the Treble staff, counting ***up.***
A is the fourth space of the Bass staff, counting ***down.***

F is the fifth line of the Treble staff, counting ***up.***
G is the fifth line of the Bass staff, counting ***down.***

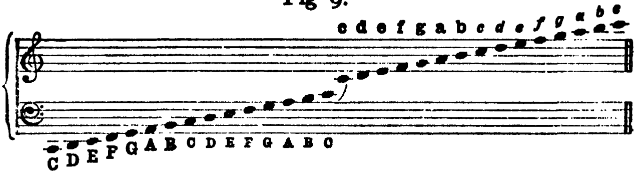
49. We have already learned that :—

G is the note above the fifth line of the Treble staff, counting *up.*
F is the note below the fifth line of the Bass staff, counting *down.*

50. These are all the notes which can be written on the Treble and Bass staves. When a sound is too high or low to be written on the staff, it is placed on, or above, a leger line. We have already learned how to write Middle C on a leger line.

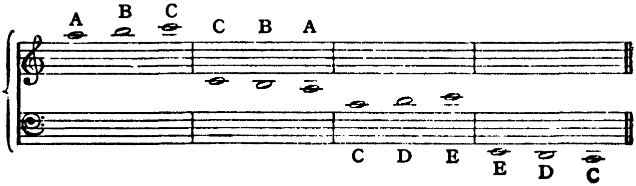
51. For our **Preparatory Examination** we have to know the names of four octaves of notes—from C below the Bass staff to C above the Treble, as shown here :—

Fig 9.



52. We see from Fig. 9 that the second leger line below the Bass staff is C ; the second leger line above the Treble staff is C also. This will help us to remember the names of the other notes above and below the staff. Here they are :—

Fig. 10.



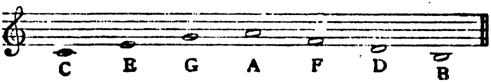
CHAPTER III.

HOW TO RE-WRITE A PASSAGE OF NOTES AN OCTAVE HIGHER OR LOWER, USING THE SAME CLEF— HINTS FOR EXAMINATIONS.

We are often asked—at Examinations—to re-write, ***at a different pitch***, some notes which are given us. We have to write these notes so that they shall sound an octave higher or an octave lower than they would if they were played at the given pitch.

Let us suppose, for example, that we are asked to re-write these given notes an octave ***higher*** :—

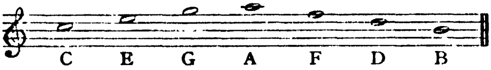
Fig. 11.



Hint I.—We have already learned (§ 34) that there must always be *three lines and three spaces between any two notes which form an octave, upwards or downwards.*

Hint II.—Now, if we count every given note as *one,* and then pass over three lines and three spaces, *upwards,* until we come to the *eighth note above,* we shall get this series of notes, which is the correct answer to the question set:—

Fig. 12.

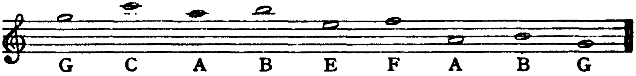


Hint III.—We must not forget, when we are counting octaves up or down, to regard all **leger lines and spaces between leger lines** as if they were lines and spaces of the staff itself.

Hint IV.—We have already observed (§ 33) that if one note of an octave is on a *line,* the other is in a *space.*

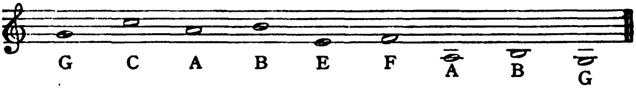
Now, suppose we are asked to re-write these notes an octave *lower*:—

Fig. 13.



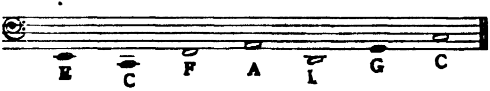
Hint V.—Working by the same rule—that is, counting each given note as *one,* and passing over three lines and three spaces on our way *downwards* to the eighth note—we get the following result, which is the correct answer to the question set:—

Fig 14.



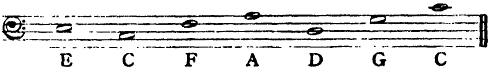
Hint VI.—We shall proceed in exactly the same way if we have to re-write a passage of notes in a different octave **on the Bass staff.** Thus:—

Fig. 15.



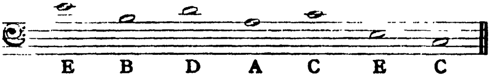
will, when re-written an octave *higher*, become :—

Fig. 16.



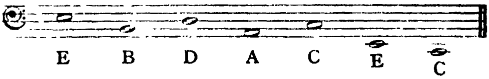
and :—

Fig. 17.



will, when re-written an octave *lower*, become :—

Fig. 18.



Hint VII.—When we are being examined, we should notice very carefully whether we are asked to re-write the given notes an octave *higher up*, or an octave *lower down*.

CHAPTER IV.

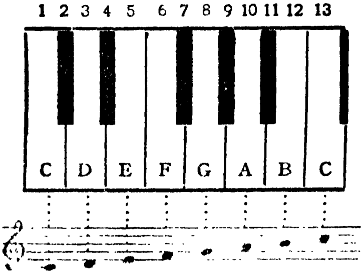
TONES AND SEMITONES—THE SHARP, FLAT, NATURAL, DOUBLE-SHARP, DOUBLE-FLAT—ENHARMONIC CHANGE—ACCIDENTALS.

53. We have now thoroughly well learned the names of the long white keys of the piano. The next thing to do is to learn the names of the **short black keys,** which are placed between *some* of the long white ones.

54. On looking at the keyboard we see there is a black key between each of the following five pairs of white ones :—

$$\left\{ \overset{1}{\overset{\frown}{C\ D}};\ \overset{2}{\overset{\frown}{D\ E}};\ \overset{3}{\overset{\frown}{F\ G}};\ \overset{4}{\overset{\frown}{G\ A}};\ \overset{5}{\overset{\frown}{A\ B}}\ \text{Pairs of white notes.} \right\}$$

Fig. 19.



55. As there is no letter of the alphabet between C and D, D and E, and so on, it will be rather curious to find out what names can be given to the short black keys which lie between these long white ones.

56. We have first to learn the difference between a **tone** and a **semitone.**

On looking at Fig. 19 we see that there are twelve keys i every octave of the piano keyboard. *Seven* of them are *white* (numbers 1, 3, 5, 6, 8, 10, 12); *five* of them are *black* (numbers 2, 4, 7, 9, 11). The octave to the first sound is numbered 13.

The difference is pitch (or **interval,** as it is called) between any two piano keys *next each other* (like $\overset{\frown}{1\ 2}$, $\overset{\frown}{2\ 3}$, $\overset{\frown}{5\ 6}$, $\overset{\frown}{12\ 13}$) is called a **semitone.**

57. A **semitone** can lie between a white and a black key, as $\overset{\frown}{1\ 2}$; between a black and a white key, as $\overset{\frown}{2\ 3}$; or between two white keys (*when there is no black key between them*), as $\overset{\frown}{5\ 6}$, $\overset{\frown}{12\ 13}$.

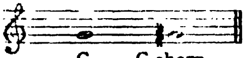
58. A **semitone** is the smallest interval which can be sounded on the piano keyboard.

The interval between any piano key, and *the next but one*—as $\overset{\frown}{1\ 3}$, $\overset{\frown}{5\ 7}$, $\overset{\frown}{11\ 13}$—is called a **tone.**

59. A **tone** can lie between two white keys, *with a black key between them*, as $\widehat{1\ 3}$; between two black keys, with only *one* white key between, as $\widehat{2\ 4}$; between a black and a white key, with one white key between, as $\widehat{4\ 6}$; or between a white and a black key, with one white key between, as $\widehat{5\ 7}$.

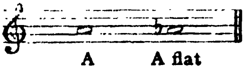
60. A **sharp** (♯) written *before* a note **raises** its pitch one semitone.

Fig, 20.



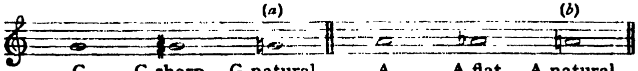
61. A **flat** (♭) written *before* a note **lowers** its pitch one semitone.

Fig. 21.



62. A **natural** (♮) restores any note to its first pitch. It is used to **contradict** a ♯ or a ♭.

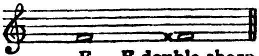
Fig. 22.



63. In Fig. 22 (*a*) the ♮ *lowers* a sharpened note to its first pitch; in Fig. 22 (*b*) the ♮ *raises* a flattened note to its first pitch.

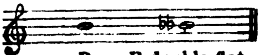
64. A **double-sharp** (**x**) written *before* a note raises its pitch **two semitones.**

Fig. 23.



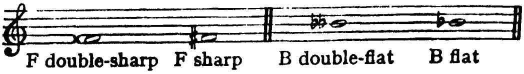
65. A **double-flat** (♭♭) written *before* a note lowers its pitch **two** semitones.

Fig. 24.



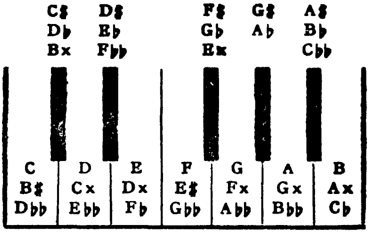
66. To **lower a doubly-sharpened note a *semitone*, write a single sharp**; to raise a doubly-flattened note a semitone, write a **single flat.**

Fig. 25.



67. Fig. 26 will show the **different names** by which each of the twelve keys in every octave of the piano keyboard may be called.

Fig. 26.



68. Notice that the **middle one** in every group of *three* black keys can only be called by **two** names—G sharp and A flat. All the other eleven keys can be called by *three* names, as shown in Fig. 26.

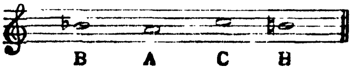
69. Sometimes the name of the same piano key is changed upon paper, whilst the pitch of the note remains exactly the same. This is called an **enharmonic change.**

70. A ♯, ♭, x, ♭♭, or ♮, which does not belong to the scale or key indicated at the beginning of the music, is called an **accidental.** It occurs in the music *accidentally* as it were.

71. The **effect of an accidental continues** throughout the "bar" (see §§ 116 and 117) in which it occurs, unless it is contradicted by another accidental.

72. The Germans call the note B flat simply B; B natural they call H, as shown in Fig. 27 :—

Fig. 27.



CHAPTER V.

SHAPES AND RELATIVE LENGTHS OF NOTES AND RESTS.

73. The **shape of a note** shows the relative *time*, *duration*, or *length* of the tone or sound it represents.

74. There are **seven kinds** of differently shaped notes. Here is a table of them :—

Fig 28.

Comparative money values.	Shapes and Time-Names of Notes.	Descriptions of Notes.
8d.	The longest note or *Breve.*	An open, egg-shaped note, with two upright strokes on either side of it.
4d.	Whole note or *Semibreve* (half *breve*).	A simple egg-shaped open note.
2d.	Half note or *Minim.*	An open note, with a stem turned either up or down.
1d.	Quarter note or *Crotchet.*	A filled-in black note, smaller than a Semibreve or Minim, with a stem turned either up or down.
½d.	Eighth note or *Quaver.*	Exactly like a Crotchet, with a hook to its stem.
¼d.	Sixteenth note or *Semiquaver.*	With *two* hooks to its stem.
half-a-farthing.	Thirty-second note or *Demisemiquaver.*	With *three* hooks to its stem.

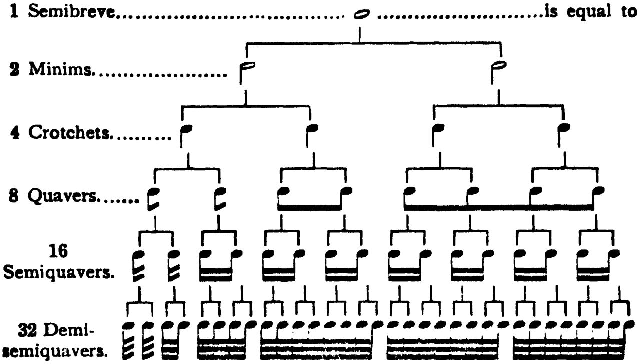
It will be observed that the more we add to a note, the shorter it becomes.

N.B.—The longest note or **Breve** *is not very often used in piano music.*

75. **We see by the comparative** ***money*** **values that every kind of note is exactly** ***half*** **the length of the** ***next longest***

note, and *twice* the length of the *next shortest* note. This will be seen more clearly in Fig. 29.

Fig. 29.


1 Semibreve .... is equal to
2 Minims.....................
4 Crotchets..........
8 Quavers.......
16 Semiquavers.
32 Demisemiquavers.

It will be necessary for candidates to keep this table well in mind, when **at the Examination** they are asked to re-write a passage in notes which are half or double the length of the notes given.

76. With the exception of the semibreve, **each note has two distinct parts**—viz., a *head*, and a *stem* or *tail*. To the stems of the quaver, semiquaver, and demisemiquaver, one, two, or three *hooks* are added.

77. The **semibreve** consists of a round open head only, and is equal in time-value or duration to two minims, however slow or quick may be the general speed or pace of the music in which it occurs : 𝅝 = 𝅗𝅥 𝅗𝅥

78. The **minim** is shaped like a semibreve, but has a *stem* added to its white open head. It is equal to two crotchets : 𝅗𝅥 = ♩ ♩

79. The **crotchet** is a smaller (black) note with a stem, and is equal to two quavers : ♩ = ♪ ♪

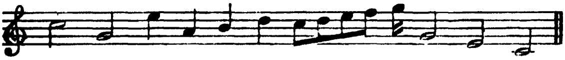
80. The **quaver** is shaped like a crotchet, but has a *hook* added to its stem. It is equal to two semiquavers : ♪ = 𝅘𝅥𝅯 𝅘𝅥𝅯

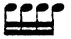
81. The **semiquaver** has *two* hooks, and is equal to two **demisemiquavers** (with *three* hooks) : 𝅘𝅥𝅯 = 𝅘𝅥𝅰 𝅘𝅥𝅰

82. It does not affect the duration of a note if the stem be turned upwards or downwards.

83. When we write music **at the Examination,** we must remember that all notes which are *below* the middle line of a staff have their stems turned *upwards*—to the *right* of the head; whilst all notes *above* the middle line have their stems turned *downwards*—to the *left* of the head.

Fig. 30.



84. When several quavers, semiquavers, or demisemiquavers follow each other, their stems are generally joined thus :—  so as to form **groups of short notes.**

85. The lines which join the stems of quavers and shorter notes still, have the same *time-meaning* as the hooks which are joined to the stems of single quavers, etc.

86. A **rest** indicates *silence,* exactly as a note indicates *sound.*

87. Every note has its corresponding rest, which is equal to it in time-value, as shown in Fig. 31.

Fig. 31.

𝅜, 𝅜 or ▭	Longest note or *Breve.*	𝄺	Rest placed perpendicularly between two lines of the staff.
𝅝	Whole note or *Semibreve.*	𝄻	Rest *hangs from* a line of the staff.
𝅗𝅥	Half note or *Minim.*	𝄼	Rest *supported on* a line of the staff.
𝅘𝅥	Quarter note or *Crotchet.*	𝄾 or 𝄽	*Head* of rest turns to the *right,* as does the initial letter C of the word "Crotchet."
𝅘𝅥𝅮	Eighth note or *Quaver.*	𝄾	*Head* of rest turns to the *left,* as does the initial *small* letter *q* of the word *quaver.*
𝅘𝅥𝅯	Sixteenth note or *Semiquaver.*	𝄿	Rest has a *double* head, like the double hook of the note.
𝅘𝅥𝅰	Thirty-second note or *Demisemiquaver.*	𝅀	Rest has a *triple* head, like the triple hook of the note.

88. *It* will be seen from Fig. 31 that **the position of the stem or tail of a rest** with respect to its head *influences the time-value of the rest.* This is not the case with notes. A *crotchet,* for example, *may* have its stem either to the right or left of the head, and be turned upwards or downwards; but a crotchet *rest* must have its stem to the *left* of its head, and be always turned downwards. If the stem is to the right of the head, the rest is changed at once from a crotchet to a *quaver* rest.

89. **Why rests are used in music.** They give *breathing places* to singers, and afford a momentary relief to the continual use of a player's fingers. In this way *they prevent fatigue.* Exactly as we could not go on reading or even listen to reading without using *stops,* so we cannot go on playing, singing, or even listening to music without the use of *rests.*

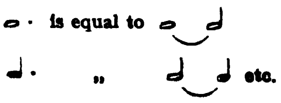
CHAPTER VI.

DOTS—TIE OR BIND—PAUSE—STACCATO MARKS—SLUR.

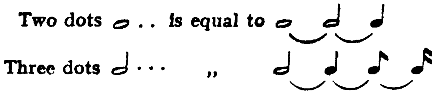
90. Sometimes it happens that we wish to write a note longer in duration or time-value than, let us say, a minim, but not as long as a semibreve. Or, to express this in "comparative money values," we may, perhaps, wish to write a note worth 3d., which is, as we know, more than 2d., but less than 4d., as shown in Fig. 28. A note can be so lengthened or continued beyond its ordinary period of duration in two ways:—

(1) By placing a dot (or dots) after the note.
(2) By binding or tying the note to another of the same pitch.

91. A **dot** placed after a note increases its length or duration one half, thus:—



92. A **second dot** adds half the length of the first **dot,** and so on with any number of dots, thus :—

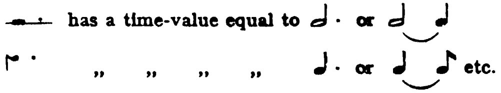


93. Twice the value of a dotted quaver is a dotted crotchet; twice the value of a dotted crotchet is a dotted minim, and so on. And, we must never forget that it is impossible, by adding any number of successive dots to a note, to *double* its time-value.

94. Again, half the value of a dotted semibreve is a dotted minim ; half the value of a dotted minim is a dotted crotchet, and so on.

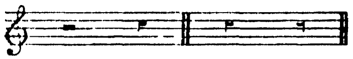
95. The curved line ⌒ shown in §§ 91 and 92 is named a **Tie** or **Bind.** It is used to connect two notes of the same pitch, and indicates that the first note of those so tied or bound is to be sounded, while the others are to be held on for their respective time-values.

96. Dots (but *not* ties or binds) are used for prolonging the time-values of rests as well as of notes. Thus :—

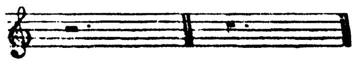


97. Instead of writing dots after rests, we very often make up the required duration of silence by *two or more rests* of various values, *the longer first, the shorter afterwards.* For example—if a rest equal in time-value to three crotchets be required, a minim rest followed by a crotchet rest is preferable to a *dotted* minim rest. Any number of rests used to indicate one continuous silence are never *tied* like a corresponding number of notes used to indicate one continuous sound. Thus :—

Fig. 32.

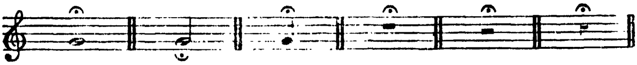


is often used instead of—



98. Any note or rest may be **prolonged indefinitely** by means of a sign called a **pause**, which may be written over or under such a note or rest.

Fig. 33.



99. If the pause is over a **note**, the sound **may** be kept on as long as the player, singer, or conductor* pleases.

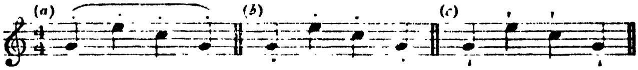
100. If the pause is over a **rest**, the sound, as well as the time, must stop.

101. A pause of unusual length over a rest is sometimes marked **lunga pausa.**

102. The letters **G P** (which stand for **Gran Pausa**) also mean a pause of more than ordinary length.

103. The shorter notes (such as the crotchet, quaver, semiquaver, etc.) often have their period of sound-duration *made shorter* by means of **staccato marks.** A note (or passage of notes) may be indicated for three grades of staccato performance by placing *above* or *below* the notes (*a*) small dots combined with slurs, (*b*) dots only, (*c*) dashes only.

Fig. 34. **The Three Staccato Grades.**



104. **Mezzo** (or slurred) **staccato.** Here the sound duration of each note is shortened by a quarter of its length, by means of the dot and slur.

105. **Staccato.** Here the sound-duration of each note is shortened by half its length, by means of the *dot* alone.

106. **Staccatissimo.** Here the sound-duration of each note is shortened by three-quarters of its length, by means of the *dash*. Staccatissimo also implies emphasis or additional force given to the notes.

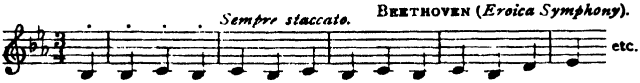
---

* A *conductor* is a person who directs a band or chorus at a concert, by "beating time" with a stick.

107. **But the time-value taken from any note by a *staccato* mark must be made up by *silence*** before the next note is heard. **Therefore, in Fig. 34, E,** the second note, will not be heard ***any sooner*** because G, the first note, is "cut off short" by the staccato mark ; it will be sounded at the very same instant at which it would naturally come if G were **prolonged or sustained** to its full time-value.

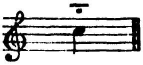
108. **If the** passage be of considerable length, ***sempre*** **(always)** ***staccato*** is written :—

Fig. 35.



109. If a **single note** is intended to be played **mezzo-staccato,** it is marked thus :—

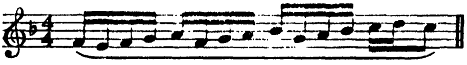
Fig. 36.



110. There is **another curved line** which resembles a **tie** or bind in appearance, but which has a different use in music. It is called a **slur.**

111. The **slur** is a curved line, which, when placed over or under several notes, signifies that they are to be played in the **legato style,** *i.e.*, smoothly and connectedly :—

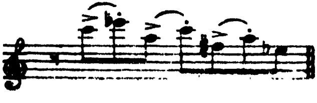
Fig. 37.



112. In **violin music** the slur is used to show how many **notes are to be played *in the same bow.***

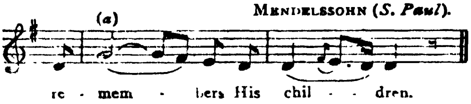
113. When the slur is placed over or under **two notes** of **different pitch, a stress should be placed on the first, and the second should be played lightly** :—

Fig. 38.



114. The slur is used in vocal music when more than one note has to be sung to one syllable :—

Fig. 39.



In Fig. 39, notice at (*a*) a **combined use of the tie and slur.**

CHAPTER VII.

ACCENT—TIME-SIGNATURES.

115. When we *listen* to music we notice—in addition to differences of pitch and time-value—that certain notes are sung or played with greater **force** or **stress** than others. This force, stress, or emphasis, we call **accent.** Sometimes accents are called **pulses** or **beats.**

116. And when we *look* at a piece of printed music, we see that the entire piece is divided or measured off into small equal portions, by little upright lines drawn across the staves. These little upright lines are called **bars.**

117. The "measures" or spaces between the upright bar-lines are also called **bars.** Every piece of music does not begin with a **full** bar. Some pieces begin with only a **part of a bar.** This incomplete portion must be looked upon as having been broken away from the last bar of the piece, and be counted as such. See Fig. 39.

118. By measuring off the music into equal "bars," we are enabled to count the time and to know where the **strong accents** come. As a rule, the **first note** in every bar is more strongly accented than any of the others.

119. There are three kinds of accent in music :—

STRONG,
Medium,
Weak.

120. When music is played or sung, the **strong** accents are marked with greater loudness and force than the rest; the medium accent has a *moderate stress* given to it, and the *weak* accent is taken lightly.

121. In every bar the accents come in a fixed **regular order.** This regular grouping of the accents or beats in a bar is called **rhythm.**

122. A **time-signature** is placed at the beginning of a piece of music to show us how many accents or beats we are to count in every bar.

123. A time-signature is made up of **two figures** placed one above the other. It is something like a *fraction* to look at, but it *never has a line drawn between the two figures,* which the fraction has.

124. The **upper figure** of the time-signature shows us how many accents, pulses, or beats, we have to count in a bar.

125. The **lower figure** of the time-signature shows us the time-value of each accent, pulse, or beat. It points out to us *how many of those time-values are contained in a semibreve.* If the lower figure is 2, it means *minims,* because a semibreve is worth two minims. If the lower figure is 4, it means *crotchets*; if 8, it means *quavers*; if 16, it means *semiquavers,* because a semibreve is worth four crotchets, eight quavers, or sixteen semiquavers.

126. $\genfrac{}{}{0pt}{}{2}{4}$ therefore means two *crotchets* in a bar; $\genfrac{}{}{0pt}{}{3}{2}$ means three *minims* in a bar; $\genfrac{}{}{0pt}{}{4}{8}$ means four *quavers* in a bar, and so on.

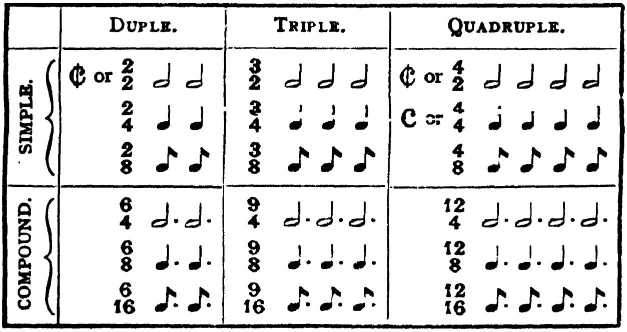
127. There are three principal kinds of time-division in music: **Duple,** with two beats in a bar; **Triple,** with three beats in a bar; **Quadruple,** with four beats in a bar. Quadruple time, with four crotchets in a bar, is sometimes called **Common time.**

128. These three kinds of time-division may be either **Simple** or **Compound.** In **simple time,** each beat is a *simple* note, which can be divided into 2. In **compound time,** each beat is a compound or *dotted* note, which can be divided into 3.

Prep.

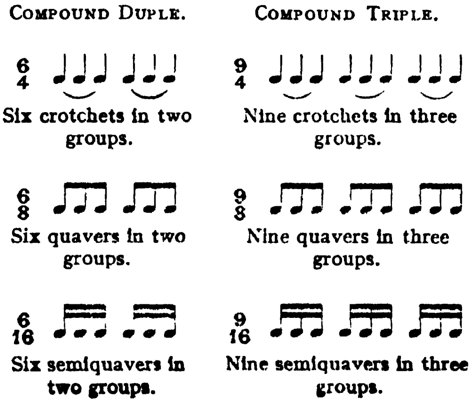
129. **Fig. 40 shows all the time-signatures in general use :—**

Fig. 40.



130. The **Simple** time-signatures are very easily understood from a study of Fig. 40. The **Compound** time-signatures will be better understood when the **sub-divisions** of the compound beats are shown.

Fig. 41.



Six crotchets in two groups.

Nine crotchets in three groups.

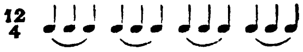
Six quavers in two groups.

Nine quavers in three groups.

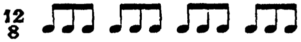
Six semiquavers in two groups.

Nine semiquavers in three groups.

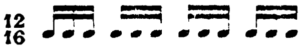
COMPOUND QUADRUPLE.



Twelve crotchets in four groups.



Twelve quavers in four groups.



Twelve semiquavers in four groups.

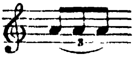
Here in Fig. 41 the *dotted-note* beats of Fig. 40 become *groups* of three notes.

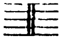
131. We shall find it easy to remember which is simple and which is compound time, if we think that, in **simple** time, the **upper** figures are: **2** for *duple*, **3** for *triple*, **4** for *quadruple*. In **compound** time each beat is a dotted note, which can be divided into **3**; hence, if we *multiply* the *upper* figures of the simple time-signatures by **3**, we shall get the *upper* figures for the compound time-signatures, namely: **3** times **2** are **6**; **3** times **3** are **9**; **3** times **4** are **12**.

132. In **compound** time-signatures the **lower** figure always shows the time-value of each of the three notes of the group into which the dotted beat-note is divided. These group-notes are twice as short as the notes indicated by the lower figures in the simple time-signatures; if we, therefore, *multiply* the *lower* figures of the simple time-signatures by **2**, we shall get the *lower* figures for the compound time-signatures, namely: twice **2** are **4**; twice **4** are **8**; twice **8** are **16**.

133. Very often, in music written in simple time, we find beats divided into *three* instead of two. A group of three

notes which occupies the time of two of the same kind is called a **triplet.** A triplet is generally marked with a curve, having the figure 3 underneath, so :—



134. A **double bar**  marks the end of a piece or the end of one of its important divisions. A double bar has nothing whatever to do with the time or rhythm of the piece.

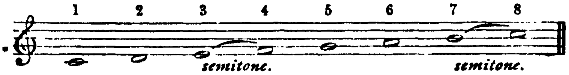
CHAPTER VIII.

DIATONIC MAJOR SCALES AND THEIR KEY-SIGNATURES.

135. A **Scale** is a series of eight sounds, ascending or descending, by steps or degrees, in alphabetical order, from any note to its octave.

Here is the **Scale** of C Major, which we already know :—

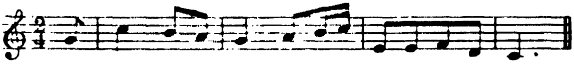
Fig. 42.



136 A **Key** is the name given to the notes of any scale when they are played or sung in any order of melody or harmony the composer chooses.

Here is a **tune** formed out of the same notes of this Scale of C Major, but arranged in a different order—not alphabetical :—

Fig. 43.



137. In every **Diatonic** Scale there are eight degrees (including the octave of the first note), and ***no other two degrees have the same letter-name.***

138. Every **Major** Scale is Diatonic and has this **settled order of tones and semitones** :—

From 1st to 2nd note a tone.
,, 2nd to 3rd ,, tone.
,, 3rd to 4th ,, *semitone.*
,, 4th to 5th ,, tone.
,, 5th to 6th ,, tone.
,, 6th to 7th ,, tone.
,, 7th to 8th ,, *semitone.*

139. A glance at Fig. 1 (page 8) will make this perfectly plain. It will be seen that the **semitones** come between the 3rd and 4th, and the 7th and 8th degrees.

140. Every major scale can be divided into two equal parts, each of which is called a **Tetrachord.**

The word Tetrachord means "four strings" (sounds).

141. There are, then, two tetrachords in every diatonic scale, the lower and the higher.

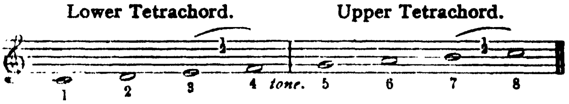
142. In every major scale there is a whole tone between the last note of the lower tetrachord and the first note of the upper tatrachord.

143. A **tetrachord** (being half a scale) is made up of **four notes.** Every tetrachord has its degrees, or steps, arranged in this order :—tone, tone, *semitone* ; in other words, the semitone comes between the 3rd and 4th notes of the tetrachord.

144. Every tetrachord can belong to two scales ; it can be the upper half of one, and the lower half of another.

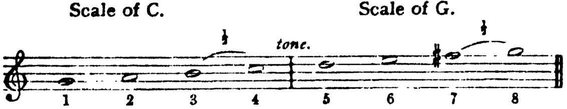
145. Here is the Scale of C Major showing its two tetrachords :—

Fig. 44.



If the *upper* tetrachord of this Scale of C be taken as the *lower* tetrachord of a new scale, we have only to add at its upper end—at the distance of a tone—*another tetrachord*, and the new scale is formed at once.

Fig. 45.

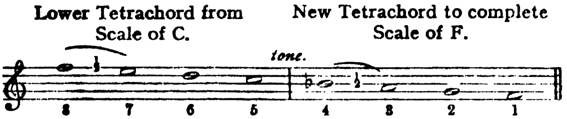

Upper Tetrachord from Scale of C.
New Tetrachord to complete Scale of G.
tone.
1
2
3
4
5
6
7
8

146. The sharp before the F (7th degree) is necessary in order to make the semitone come between the 7th and 8th degrees of the new Scale of G.

The 7th degree of every scale is therefore its *sharpest note*.

147. By reversing the process, *i.e.*, taking the *lower* tetrachord of the natural Scale of C as the *higher* tetrachord of a new scale, we obtain the Scale of F.

Fig. 46.


Lower Tetrachord from Scale of C.
New Tetrachord to complete Scale of F.
tone.
8
7
6
5
4
3
2
1

148. The flat before the B is necessary to lower that degree half a tone, so that the tetrachords should be *divided by a tone*, and to make the semitone between the 3rd and 4th degrees of the new Scale of F.

The 4th degree of every scale is therefore its *flattest note*.

149. If we continue the process of taking the *upper* tetrachord of one scale as the *lower* tetrachord of the next, we shall reach at length the Scale of C♯, in which every note has a sharp written before it. See Fig. 47.

150. And if we continue the process of taking the *lower* tetrachord of one scale as the *higher* tetrachord of another, we shall reach the Scale of C♭, in which every note has a flat written before it. See Fig. 48.

151. There are only **two rules** to remember in making all these new scales :—

Rule I.—There must be only one semitone in every tetrachord, which must come between its last two degrees.

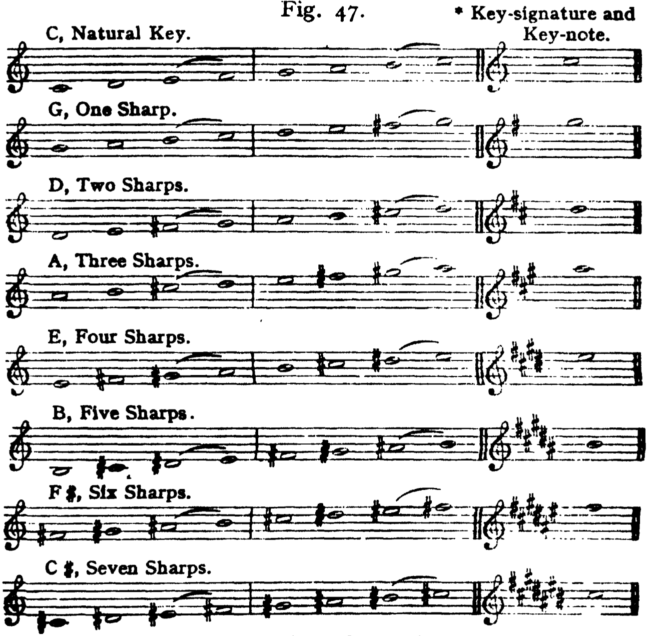
Rule II.—**In joining tetrachords together, there must be a whole tone** (not a semitone) between the fourth note of the lower tetrachord and the first note of the upper tetrachord.

152. There are **two ways of writing** scales :—

(i.) With the necessary sharps or flats written as "**accidentals**" before the notes they raise or lower ; and—

(ii.) With the necessary sharps or flats grouped together in one place, directly after the clef. This group of sharps or flats we call the **Key-signature.** *After* its Key-signature any scale can then be written up or down, without using a single "accidental." Fig. 47 shows the whole of the Major Scales which need **sharps** (beginning with the natural Scale of C). The proper Key-signature belonging to each scale is also given.

Fig. 47.



The slurs show where the semitones come.

* For Bass key-signatures and key-notes, see page 39.

153. If we look at the **Key-signatures** in **Fig** 47, **we** notice two things :—

(i.) That the **order of sharps** is—F, C, G, D, A, E, B.

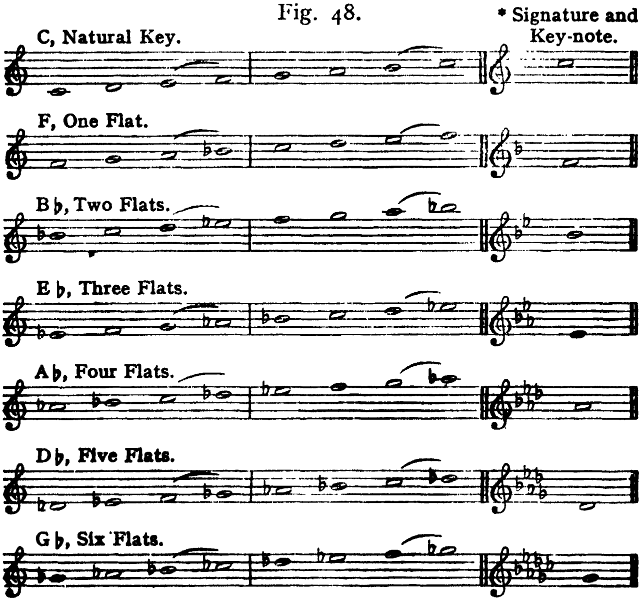
Observe that F, C, G were the first note-positions learned (see Fig. 6), and that D, A, E, B represent the word "Bead" *spelt backwards.*

(ii.) That the **Key-note,** or that note which the scale begins with, is always one semitone above the *last* sharp—that sharp which is farthest away from the clef.

154. The seventh note of every scale—that which has the last sharp written before it—is called the **Leading-note,** because it *leads up* to the key-note.

155. Fig. 48 shows the whole of the Major Scales which need **flats** (beginning with the natural Scale of C). The proper key-signature belonging to each scale is also given.

Fig. 48.



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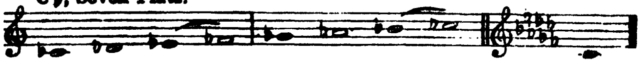
* For Bass key-signatures and key-notes, see page 39.

C♭, Seven Flats.



The slurs show where the semitones come.

156. If we look at the **key-signatures** in Fig. 48, we notice two things :—

(i.) That the **order of flats** is—B, E, A, D, G, C, F (which is like reading *the order of sharps backwards*).

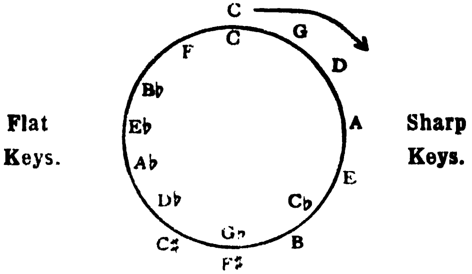
(ii.) That the **key-note** is always the fourth note below the *last* flat—that flat which is farthest away from the clef.

157. The fourth note of every scale—that which has the last flat written before it—is called the **Sub-dominant.**

158. The complete **Circle of Scales** will be twelve, whether we take six sharp keys, one natural key, and five flat keys, or five sharp keys, one natural key, and six flat keys :—

Fig. 49.

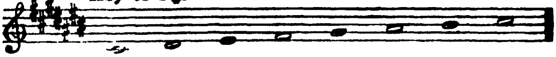
Circle of Scales.



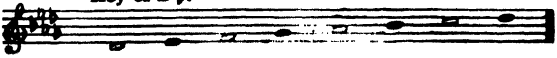
159. On the piano C♯ and D♭ have the **same pitch, there**fore the scales having these notes for their tonic or key-note will have the same sound :—

Fig. 50.

Key of C♯.



Key of D♭.



160. Other pairs of scales which have the same pitch on the piano are—G♭ and F♯; C♭ and B. A change from one of these paired scales to the other is called **Enharmonic.**

161. When all the seven letters of the musical alphabet have been made sharps, an *accidental* double-sharp is used for the eighth sharp.

162. Similarly, an *accidental* double-flat is used as the eighth flat.

163. It may help us to remember the number of sharps or flats which belong to any key-note if we once more group the various key-notes in the order in which we learned our notes on the piano score:—

{ D ; E ; F }
{ B ; A ; G }

From Figs. 47 and 48 we learn that:—

C has no sharps or flats; C♯ has 7 *sharps*; C♭ has 7 *flats*.

{ D♭ has 5 *flats*; E♭ has 3 *flats*; F has 1 *flat*. }
{ B has 5 *sharps*; A has 3 *sharps*; G has 1 *sharp*. }

{ D has 2 *sharps*; E has 4 *sharps*; F♯ has 6 *sharps*. }
{ B♭ has 2 *flats*; A♭ has 4 *flats*; G♭ has 6 *flots*. }

Hints for Examinations.—When asked to write scales **at an Examination,** we ought to notice very carefully:—

(i.) Whether we have to write the scale *up* or *down*;

(ii.) whether *Treble* clef or *Bass* clef be asked for;

(iii.) whether the key-signature is required by the Examiner, or the necessary accidentals *before* the notes which need them;

(iv.) whether the *notes asked for* be semibreves, minims, crotchets, quavers, semiquavers, etc.;

(v.) which note, degree, or step of the scale we are asked to begin upon, as 7th, 5th, 4th, 2nd, 1st, etc.:

(vi.) if we are asked to mark the position of the semitones by slurs or otherwise.

Table of Bass Sharp Key-signatures with Key-notes :—

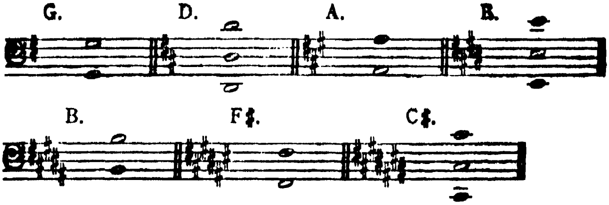
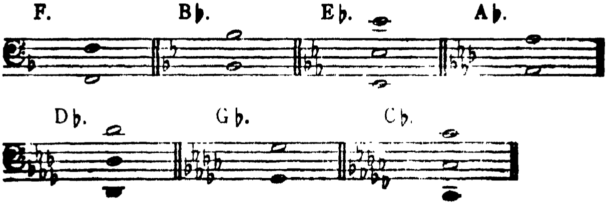


Table of Bass Flat Key-signatures with Key-notes :—



CHAPTER IX.

MARKS AND WORDS RELATING TO TONE AND SPEED.

164. **Italian words**—written either at **full length** or **cut short** in some way—are used to show :—

(i.) the **quantity** of **tone** (loudness or **softness**) required;

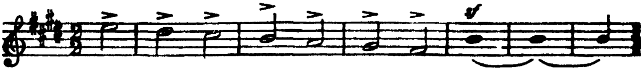
(ii.) the **speed** (fast or slow) at which the music ought to be played or sung.

165. **Words, letters, and signs, indicating Loudness or Softness of Tone :—**

Pianissimo (*pp*), very soft.
Mezzo piano (*mp*), moderately soft.
Piano (*p*), soft.
Mezza voce (*mv*), medium tone.
Mezzo forte (*mf*), moderately loud.
Forte (*f*), loud.
Fortissimo (*ff*), very loud.
Crescendo or <, **gradually increasing in tone.**
Decrescendo } or >, **gradually decreasing in tone.**
Diminuendo }
Sforzando (*sf*), }
Forzando (*fz*), } forcing the tone.
Rinforzando (*rf*), }

A sign like this (>) is often used to mark **strongly-accented notes :—**

MENDELSSOHN: ***Midsummer Night's Dream.***



166. **The Metronome is an instrument invented for the** purpose of accurately measuring the time or ***speed*** **of a piece of music.** Clockwork **mechanism inside sets in motion an** outside pendulum, **the speed being regulated by a sliding weight, according to the various grades of time measured on the index.** The Metronome **should beat once a second, or 60 times a minute, if set at 60.**

167. For example : ♩=126 means that the sliding weight should be set to 126 on the index, when, on the instrument being set in motion, the beats of the pendulum show the speed of the *crotchets*.

𝅗𝅥=80 means that the weight should be set at 80, when the pendulum-beats show the speed of the *minims*.

168. **Words indicating Speed:—**

Grave, solemn.
Lento, very slow.
Largo, broad, slow, grand (♩=40 to ♩=69).
Larghetto, rather broadly (♩=72 to ♩=96).
Adagio, slow; leisurely (♩=100 to ♩=126).
Andante, going at a moderate pace (♩=126 to ♩=162).
Andantino, not so slow as *Andante*.
Moderato, moderate speed.
Allegretto, rather fast.
Allegro, merry, lively, fast (♩=160 to ♩=184).
Vivace, with life and energy.
Presto, very quick (♩=184 to ♩=208).
Prestissimo, as quickly as possible.

169. The following other words relating to speed are also very often to be met with :—

Accelerando (*accel.*), accelerating, getting faster.
Rallentando, gradually getting slower.
Calando, decreasing in speed and tone.
Ritardando, *Ritenuto* (*rit.*), retarding, by holding back the time. Other words which have much the same meaning are *Slentando* and *Slargando*.
A tempo, in time.
Ad libitum or *A piacere*, at the performer's pleasure.
Meno mosso, *less* moved—slower at once.
Più mosso, *more* moved—quicker at once.

Hints for Examinations.—We may either have Italian words or signs given us in order that we may say what they mean in English ; or, we may have the English meaning given us, and be asked to say what is the Italian word which has that meaning.

CHAPTER X.

USEFUL HINTS FOR EXAMINATIONS.

At the Examination, **the Examiners will pay special attention to** :—

Correct spelling.

Accuracy of notation, including—

Correct position of stems with respect to the notes.

Proper order and position of sharps and flats in key-signatures.

The insertion of necessary accidentals, ties, slurs, etc., in the given passages for transposition.

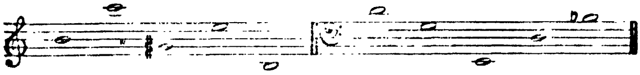
No marks will be given for incorrect notation of scales or transposed phrases.

The following is a specimen paper for the Preparatory Division of the Trinity College of Music Local Examinations in Musical Knowledge :—

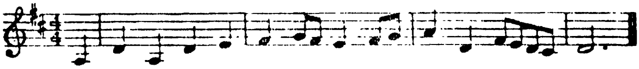
Time allowed—Two hours.

Marks required for Pass Certificate, 65.

1. (10 marks.) Under each of these notes write its letter-name :—

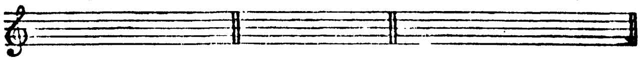


2. (15 marks.) Write out this passage an octave higher :—

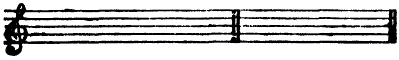


3. (10 marks.) Write :—

A triplet of Quavers. A Minim. A dotted Demisemiquaver.

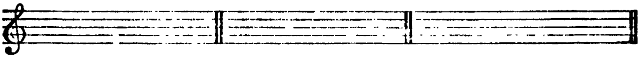


A Pause. A Crotchet Rest.

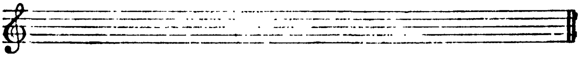


4. (15 marks.) Give the time-signatures which mean :—

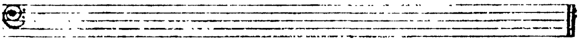
Three Crotchets. **Two Minims.** **Nine Quavers.**



5. (10 marks.) Write, in **Minims,** the **descending scale** of A major, with proper key-signature :—



6. (15 marks.) Write, in **Crotchets,** the **ascending** scale of D flat major, with proper key-signature :—



7. (10 marks.) Write the *Signs only* which mean :— Moderately soft ; Very loud ; Soft ; Forced, accented, or emphasized ; Gradually diminishing in tone.

8. (15 marks.) Give the English meanings of the following Italian terms :—*Adagio ; Allegro ; Ad libitum ; Largo ; Prestissimo.*

HINTS FOR EXAMINATION CANDIDATES.

Hint I.—In **writing the names of notes** which have a ♯, ♭, or ♮, written before them, we ought to give the name of the accidental in full : thus—G *sharp,* A *flat,* B *natural ;* not G♯, A♭, B♮, or worse still, ♯G, ♭A, ♮B.

Hint II.—If we are asked **to write the notes themselves,** we must be careful to put all accidentals *before* the notes to which they belong, **not after** the notes.

Hint III.—In **re-writing a passage of notes** at a different pitch, etc., we should be most careful to write first, the proper clef, key-signature, and time-signature required. These three things come in the order given ; the key-signature *always comes between the clef and the time-signature.*

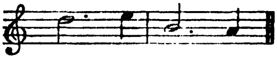
Hint IV.—Let us see too that we have *only* the correct sharps and flats actually wanted in our key-signature, and that they come—all of them—in their proper *order* and *place*. For instance, in writing the signature of G major in the Treble clef, we should *not* place the single sharp in the *bottom space*. It must go on the *top line*.

Hint V.—Next let us take care that every note-stem is placed on the proper *side* of the note to which it belongs, and is turned in the proper direction, up or down (see § 83, page 23).

Hint VI.—If a dotted note is written on a line of the staff, we ought to place the dot in the space *above* if the next note be a higher one.

Hint VII.—But we should place the dot in the space *below* if the next note be a lower one. Fig. 51 will show us how to properly place the dot after a note written on a line :—

Fig. 51.



Hint VIII.—In no case should any dot be written *on a line* of the staff.

Hint IX.—We should never write a time-signature exactly like a fraction, with a line drawn between the two figures, thus : $\frac{2}{4}$ is *wrong* ; $\genfrac{}{}{0pt}{}{2}{4}$ is *right*.

Hint X.—We should not be careless, and so leave out any *accidental* which may occur in the given melody.

Hint XI.—Let us see that we put in our own exercises all the *slurs, ties, staccato marks*, etc., which may be marked in the copy set us.

Hint XII.—In addition to the hints already given for the proper **writing of scales** (see Chapter VIII.), we must take *great* care not to *leave out* a note of the scale.

Hint XIII.—Nor should we *repeat* one of the notes of a scale. In a word, let us be very careful not to write more nor less than eight notes altogether, up or down.

***Hint XIV.*—Let us not, in any case, make blots.**

Hint XV.—Let us take the greatest care to **correctly spell** every word we may have to write.

Hint XVI.—It will be well for us if we read each question through twice, and see that we thoroughly understand what we are asked to do before we put our pens to the paper.

Hint XVII.—Never let us be in a *hurry*, or we shall not do work sufficiently good to pass the Examination. **It is the sure** and slow but *careful* work which always wins success.

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A TEXT-BOOK
OF
MUSICAL KNOWLEDGE.

JUNIOR DIVISION.

Prepared for the Use of Students,

MORE ESPECIALLY FOR THE

LOCAL CENTRE EXAMINATIONS IN
THEORY OF MUSIC

OF

Trinity College of Music,

BY

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PREFACE.

THIS little Manual is intended as a Text-Book for the preparation of Candidates for the **Junior** Division of the Trinity College of Music Local Examinations in Theory of Music. It contains a complete course of instruction in all the subjects prescribed in the Syllabus for the Junior Division, together with useful hints for the successful working of Examination papers. Junior Division candidates are expected to know thoroughly the contents of the Preparatory Text-Book before they begin the study of the present manual; but for the convenience of those students who may have passed the Examination in the Preparatory Division some time ago, or who may have acquired the same knowledge from other sources, a brief *resumé* of the chief contents of the Preparatory Text-Book has been given in these pages. The attention of teachers cannot be too forcibly drawn to the great importance of **ear-training.** Every fresh point of instruction should be amply illustrated upon the pianoforte keyboard; especially such matters as the position of the semitones in the various scales, the relative duration of sounds, and their grouping according to the laws of accent, syncopation, etc., as well as the various methods of melodic *embellishment* by means of "grace-notes," turns, shakes, etc. The aural effect and scale-relationship of every interval should be clearly demonstrated to students, who should also have every facility afforded them for practising Exercises in **Musical Dictation,** and for preparing to pass the **ear-tests** demanded by the Practical Divisions of the College Local Examination System.

It is by no means intended that teachers should present the contents of this book to their pupils in the order here given, chapter by chapter. On the contrary, it may very often be necessary to vary that order considerably, so as to adapt the instruction to the different mental capabilities of the pupils. For instance, under certain circumstances a first term's work might very well be planned somewhat in this order :—

Lesson I., §§ 8–19; Lesson II., §§ 77–80; Lesson III., §§ 95–112; Lesson IV., §§ 81–94; Lesson V., §§ 25–37; Lesson VI., §§ 128–133; Lesson VII., §§ 113–124; Lesson VIII., §§ 38–48; Lesson IX., §§ 49–59; Lesson X., §§ 60–66; Lesson XI., §§ 1–7; Lesson XII., §§ 134–149. No fresh matter should be introduced before the preceding instruction has been thoroughly understood; nor should too long a period be allowed to elapse before the knowledge already acquired is further impressed upon the pupils' minds by some form of **repetition.**

Other re-arrangements can easily be made by teachers to suit their own individual requirements; but the order of contents in the present Text-Book has been planned on the lines of the College Syllabus for the Junior Division, with a view of making the work more generally useful as a **reference** as well as a **teaching** book.

A companion book of **Questions and Exercises** is published, in which the number of every *Question* corresponds exactly with the number of that paragraph in the present Text-Book, which contains the answer to the question set. The two books (if used together) will thus present the instruction in the form of a **Catechism**—with this advantage over ordinary books of that kind, viz., that questions and answers are not given together on the same page of the same book.

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A TEXT-BOOK
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MUSICAL KNOWLEDGE.

JUNIOR DIVISION.

CHAPTER I.

MUSICAL SOUNDS, AND HOW THEY DIFFER—AN OUTLINE OF MUSICAL NOTATION, SHOWING ITS VARIOUS USES TO MUSICIANS.

1. **Sound** is a sensation of the *brain* which depends entirely upon our *sense of hearing* ; it has no separate existence apart from ourselves.

2. The *immediate* cause of sound **is the vibration of a** sounding body or musical instrument.

3. **Vibration** is a very rapid to-and-fro movement (or *tremulous motion*, as it is sometimes called). We can *see* this vibration taking place in the case of a sounding string on either a piano or a violin ; we can *feel*—by touching the outside of a sounding organ-pipe—that the air within the pipe is in a state of vibration.

4. **Some medium** is necessary for carrying the vibrations of the sounding body to our ears. This medium is generally the **air.**

The vibrations of the sounding body set up in the air a corresponding number of **sound-waves.**

The sound-waves pass through the air until they reach the **drums of our ears.**

Our ear-drums, being disturbed by the sound-waves, convey the effect of the vibrations to the **brain.** It is the brain alone which by this means receives the **sensation** we call **sound.**

5. Musical sounds differ in these six ways :—

(i.) **Pitch**—by which we mean that a sound is high up, low down, or somewhere between these two extremes. Pitch depends upon the *number* of vibrations made per second by the sounding body. This vibration-number *increases* as the sounds get higher in the scale, and *decreases* as they get lower.

(ii.) **Intensity** or **quantity**—by which we mean that a sound is loud or soft, or moderately loud or soft. Intensity depends upon the *degree of force* with which the sound-waves reach our ears. The louder the sound, the more violent will be the action of the sound-waves upon our ears, and *vice versa*.

(iii.) **Quality** or **timbre**—by which we describe the *character* of a sound as being rich, full, hard, thin, etc. By their **quality** we can distinguish the sounds of a flute from those of a violin, or the tones of the human voice from those of an instrument. Quality depends upon the *manner* in which the sounding body vibrates. The playing of a flute will act differently upon the air to the playing of a violin, etc.; the sound-waves will be different, and these again will act differently upon our ears and brains.

(iv.) **Duration**—by which we mean the *length of time* a sound lasts. In listening to music we hear that some sounds are *held on* or *sustained* for a considerable time; others are "cut off" quite short; others are neither very long nor very short, etc.

(v.) **Accent**—by which we mean the *stress* or *emphasis* which is given to some sounds more than to others; exactly as in ordinary speaking or reading we lay greater stress upon certain words or syllables than upon others.

(vi.) **Tonal relationship**—by which we mean the order or arrangement of sounds into what are called **scales** and **keys**, without which it would be impossible to make or to recognise **tunes**.

All these differences in musical sounds have to be **expressed upon paper**, *so that a composer may be able to write down the music he desires to be played or sung, and* that the players and singers may be able to understand what has been written down for them.

6. A knowledge of **musical notation,** therefore, teaches us that :—

(i.) **Differences in pitch** are expressed upon paper by the various positions of notes upon a staff.

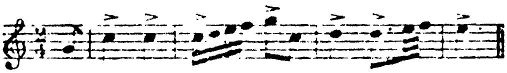
(ii.) **Differences in intensity** (quantity) are indicated by the use of words, letters, or signs ; such as *forte, piano, crescendo, diminuendo, ff, pp,* <, >, etc.

(iii.) **Differences in quality** are shown by a composer writing the name of the voice or instrument he intends to be used—such as *Soprano, Contralto, Tenor, Bass, piano, organ, violin, flute, trumpet,* etc.

(iv.) **Differences in duration** are expressed by the various *shapes of the notes* used—such as 𝅝, 𝅗𝅥, ♩, ♪, 𝅘𝅥𝅯, etc.

(v.) **Differences in accent** are indicated by the *time-signature,* which assigns various degrees of accent to the notes within a bar, thus :—

Fig. 1.

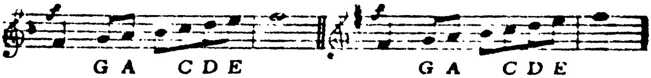


The mark (>) is here used to show which notes are accented more than others.

(vi.) **Differences in tonal relationship** are shown by the various *key-signatures,* each of which indicates that particular arrangement of notes or *scale* which has been selected by the composer for his music.

Thus, in the two scale-passages here given in Fig. 2, the five notes indicated by their letter-names—G, A, C, D, E—are exactly the same in pitch, intensity, quality, duration, and accent ; yet they produce quite a different effect upon the ear, because of the altered relationship which is effected by the change of key signature :—

Fig. 2.



For Treble voice :

For Treble voice :

In the same way the same person may appeal to us differently as we regard him in his various social relationships—as father, son, husband, brother, uncle, cousin, friend, enemy, etc.

7. **We have to study Musical Notation** in order to read, write, and understand music thoroughly. We desire to be able not only to play or sing " at sight," but also to acquire the power of knowing what a piece of music will sound like by merely *looking at it.* And we wish to be able to write down correctly any " musical thoughts " which may occur to us.

CHAPTER II.

POSITION OF NOTES ON THE STAFF—THE " REFLECTIVE " ASPECT OF THE NOTES C, D, E, F, AND C, B, A, G—LEGER LINES—TREBLE AND BASS CLEFS—ACCIDENTALS.

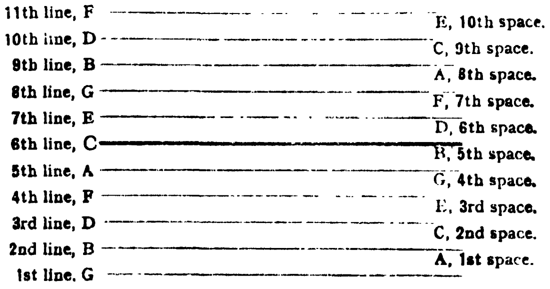
8. The first thing which any system of musical notation has to do, is to show the correct **pitch** of every sound required by the composer, in such a way as to leave no doubt as to the exact distances or *intervals* between the various sounds. The eye and mind must be assisted to perceive the **rising and falling** of the sounds as they constantly change from low to high, or from high to low. This is done by means of the **Great Staff.**

9. The **Great Staff** is a series of **eleven lines,** arranged one above the other, like the steps of a ladder.

Fig. 3.

The Great Staff.

Notice the thick " Middle C " line which corresponds with the C in the middle of the keyboard :—



On these **eleven** lines, and in the **ten spaces** between the lines, are placed the **notes** which represent the sounds required to be sung or played. Every line and every space of the Great Staff has its own particular **letter-name**, as shown in Fig. 3.

10. Students must carefully distinguish between the words **tone** and **note**. A **tone** is a musical sound of definite pitch; a **note** is a character or sign written on the staff to show by its position thereon—high, medium, or low—the exact pitch of the tone or sound it pictorially represents. The "notes" take their names from the lines or spaces which they occupy on the staff.

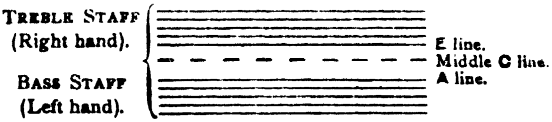
11. A **pianoforte*** **score** has ten lines. It is the Great Staff with the Middle C (thick) line omitted. The space between the A and E lines—when the Middle C line has been taken out—is *widened*, and the two five-lined staves (upper and lower) are joined together by a brace or bracket at the left-hand side.

12. The upper staff is for the Right-Hand or **Treble notes**; the lower one for the Left-Hand or **Bass** notes.

13. Whenever the note Middle C is wanted, it is written on a short line called a **leger line,** which for the moment takes the place of the omitted Middle C line—either at the top of the Left-Hand or lower staff, or at the bottom of the Right-Hand or upper staff, as in Fig. 4:—

Fig. 4.

Pianoforte Score.



14. The upper and lower staves are distinguished one from the other by **Clefs.**

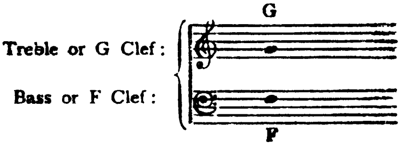
15. A **clef** is a sign which points out the name of the particular *line* it is placed upon. Originally, the clef was merely the capital **letter** indicating the name of its line:—

---

* This word is often abbreviated "piano."

Fig. 5.

Pianoforte Score, with Clefs.



16. The **Treble clef** is placed on the second line of its staff, counting *up* from the bottom. The **Bass Clef** is placed on the second line of its staff, counting *down* from the top.

17. Only the first seven letters of the Alphabet are used for naming musical sounds; any notes beyond the seven—

A, B, C, D, E, F, G—

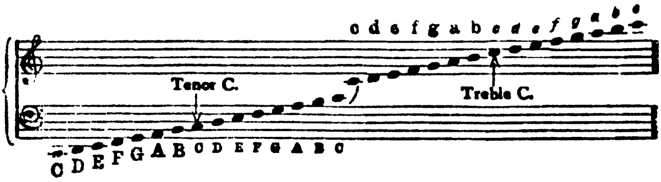
are simply repetitions of these at a higher or lower pitch.

18. The **eighth sound** is called the **Octave** (*abbreviated* "*8ve*") of the first. Any note struck with its octave blends so perfectly with it as to have the effect of a single but *brighter* sound.

19. Fig. 6 shows a continuous series of sounds, ranging from a note two octaves *below* Middle C, to a note two octaves *above* Middle C:—

Fig. 6.

Scale of C (four octaves).

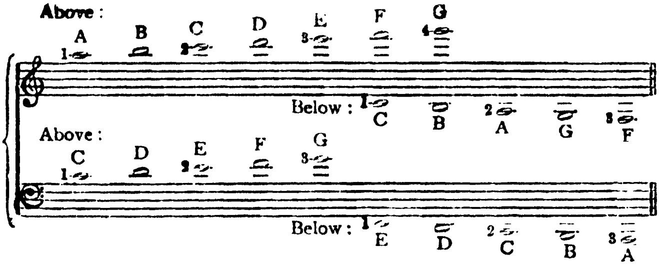


The octave below Middle C is called "Tenor C"; the octave above Middle C is called "Treble C."

As seen in Figs. 6 and 7, when a sound is too high, or too low to be written on the staff, short additional lines are used above and below the staff, called *Leger* or *Ledger* lines (*Leger*. light). Notes may be written on these leger lines, or in the spaces between them, as :—

Fig. 7.

Leger Lines.



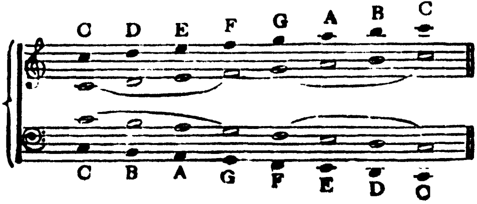
Leger lines are merely "light lines" cut short, added outside the staff.

20. It will be observed from Figs. 6 and 7 that Middle C is on the first leger line *below* the Treble staff, and is also on the first leger line *above* the Bass staff. "Treble C" is in the third space of the Treble staff, counting *upwards*; "Tenor C" is in the third space of the Bass staff, counting *downwards*. A low Bass C is to be found on the second leger line *below* the Bass staff, and a high Treble C is to be found on the second leger line *above* the Treble staff. Regarded in this way, the positions of C on the Bass staff are an upside-down—or "reflected"—image of the C positions on the Treble staff.

Similarly, G, the clef line of the Treble staff, "reflects" F, the clef line of the Bass staff, and *vice versa*—see Fig. 5 on page 12.

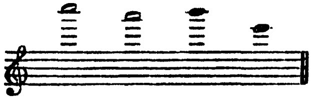
In the same way D, the second note of the scale of C, always "reflects" B, the seventh note of the scale; and E "reflects" A, as shown in Fig. 8:—

Fig. 8.



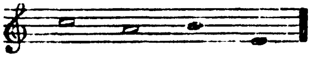
21. When *many* leger lines are used above the Treble staff, if the first two be disregarded or deducted from the rest, those above will read exactly as the Treble staff itself, *two octaves higher in pitch.* Thus :—

Fig. 9.



will be the same as :—

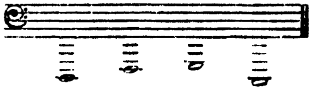
Fig. 10.



if played two octaves higher.

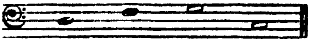
Similarly, if the first two leger lines below the Bass staff be deducted, those below will read as the Bass staff itself, *two octaves lower.* Thus :—

Fig. 11.



will be the same as :—

Fig. 12.



if played two octaves lower.

22. Sometimes, in order to avoid the use of a great many leger lines, the sign **8va** is **written over a passage** of notes, to show that they must be read, sung, or played, as if they had been written *an octave above.* The word **loco,** used after 8va, signifies that the notes are to be read, etc., in their original pitch as written.

23. **8va bassa, placed below a passage,** signifies that it is to be played *an octave lower* than written.

24. The figure 8 placed under notes indicates that the octaves below are to be played *with them.*

25. The interval or distance between any piano key and the *next* above or below it, whether black or white, is called a **semitone** or **half-tone.**

26. The interval or distance between any piano key and the *next but one* above or below it is called a **whole tone.**

27. A **sharp** (♯) placed *before* any note **raises** its pitch a *semitone.*

28. A **flat** (♭) placed *before* any note **lowers its pitch** a *semitone.*

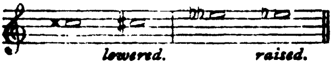
29. A **natural** (♮) restores a note to its original pitch, *lowering* it a semitone if previously sharpened, *raising* it a semitone if previously *flattened.*

30. A **double-sharp** (X) placed *before* any note **raises** it two semitones.

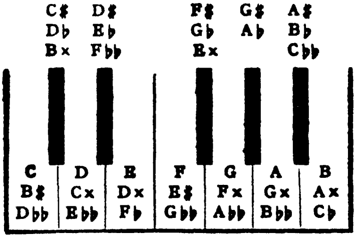
31. A **double-flat** (♭♭) placed *before* any note **lowers** it two semitones.

32. A doubly-sharpened note, or a doubly-flattened note, can be respectively lowered or raised a semitone by writing a *single* sharp or flat before a note, so :—

Fig. 13.



33. Eleven of the twelve pianoforte keys in every octave are capable of bearing three different letter-names. The remaining one (the middle key in every group of three black ones) can only be called by two names—G♯ and A♭ :—



34. A note is **enharmonically changed** when its name is changed upon paper (as C♯ to D♭), whilst its pitch upon the pianoforte keyboard remains exactly the same.

35. As a great deal of foreign music is used in this country, as well as editions of classical works which are published abroad, it is very convenient to know the **foreign names of the notes**, as shown in Fig. 14 :—

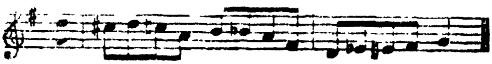
Fig. 14.

English.	Italian.	French.	German.
C.	Do.	Ut.	C
C flat.	Do bemolle.	Ut bémol.	Ces.
C sharp.	Do diesis.	Ut dièse.	Cis.
D.	Re.	Re.	D.
D flat.	Re bemolle.	Re bémol.	Des.
D sharp.	Re diesis.	Re dièse.	Dis.
E.	Mi.	Mi.	E.
E flat.	Mi bemolle.	Mi bémol.	Es.
E sharp.	Mi diesis.	Mi dièse.	Eis.
F.	Fa.	Fa.	F.
F flat.	Fa bemolle.	Fa bémol.	Fes.
F sharp.	Fa diesis.	Fa dièse.	Fis.
G.	Sol.	Sol.	G.
G flat.	Sol bemolle.	Sol bémol.	Ges.
G sharp.	Sol diesis.	Sol dièse.	Gis.
A.	La.	La.	A.
A flat.	La bemolle.	La bémol.	As.
A sharp.	La diesis.	La dièse.	Ais.
B.	Si.	Si.	H.
B flat.	Si bemolle.	Si bémol.	B.
B sharp.	Si diesis.	Si dièse.	His.

It will be seen from Fig. 14 that the Italians and French call notes by " Sol-fa " names, and use respectively *bemolle* and *bémol* for a **flat**, and *diesis* and *dièse* for a **sharp.** The Germans use letters for note-names, with the addition of *es* for a flat and *is* for a sharp : B♭ they call B ; B♮ they call H.

36. A ♯, ♭, X, ♭♭, or ♮, which does not belong to the scale or key indicated by the key-signature, is called an **accidental.**

Fig. 15.



37. The **effect of an accidental continues** upon the staff throughout the bar in which it occurs, unless it is contradicted by another accidental.

CHAPTER III.

Diatonic Scales: Major and Minor.

38. A **Diatonic Scale** is a series of eight sounds, ascending, in alphabetical order, from any note to its octave. Every step or degree bears a different letter-name from any of the others.

39. There are two kinds of diatonic scale—**major** and **minor.**

40. In the **minor** scale, the third degree or step is one semitone nearer the first degree than is the third degree of the major scale.

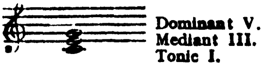
In olden days a **major** scale was often spoken of as "a scale with the *greater* third"; a **minor** scale was similarly said to be "a scale with the *lesser* third."

41. The following technical names are given to the degrees of *all* diatonic scales:—The 1st, *Key-note* or *Tonic*; the 2nd the *Super-tonic*; the 3rd the *Mediant*; the 4th the *Sub-dominant*; the 5th the *Dominant*; the 6th the *Sub-mediant*; the 7th the *Leading-note*; the 8th degree is the *upper* Key-note or Tonic.

These names will be best remembered in the following order:—

The Tonic is the 1st note (I.), and the Dominant is the 5th *above* it (V.). The Mediant (or middle note between these two) is the 3rd (III).

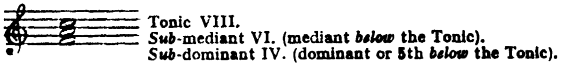
Fig. 16.



NOTE.—The Scale of C Major is here referred to; but the same technical names are given to the same numerical degrees of any other scale, major or minor.

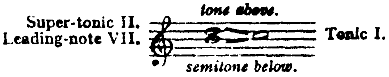
42. The Tonic is also the 8th note (VIII.), and the *Sub*-dominant is the 5th *below* it (V.). The *Sub*-mediant (or middle note between these two) is the 6th (VI.). "Sub" means *below* or *under*.

Fig. 17.


Tonic VIII.
Sub-mediant VI. (mediant *below* the Tonic).
Sub-dominant IV. (dominant or 5th *below* the Tonic).

43. The *Super*-tonic is a whole tone above the Tonic (II.)—"Super" means *above*. The "Leading-note," or 7th of the scale (VII.), is a semitone below the upper Tonic and *leads* up to it.

Fig. 18.



44. The major scales have already been explained fully in the "Preparatory Text-Book," Chapter VIII., pp. 32–38 · the chief points to be remembered about them are these :—

(i.) The semitones come between the 3rd and 4th, and the 7th and 8th degrees, both ascending and descending.

(ii.) Every major scale consists of two similarly constructed halves, called *Tetrachords*.

(iii.) Every tetrachord can belong to two different major scales, by being the upper half of one and the lower half of another.

(iv.) A whole tone comes between the 4th note of the lower tetrachord and the 1st note of the upper tetrachord in every major scale.

(v.) The sharps or flats *essential* to the scale are grouped together and placed after the clef, in the form of a *key-signature*.

45. The **key-signatures of major** scales can be easily remembered in this way :—

C has no sharps or flats ; C♯ has 7 *sharps* ; C♭ has 7 *flats*.

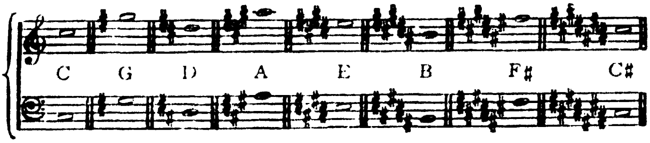
D has 2 *sharps* ; E has 4 *sharps* ; F♯ has 6 *sharps*.
B♭ has 2 *flats* ; A♭ has 4 *flats* ; G♭ has 6 *flats*.

D♭ has 5 *flats* ; E♭ has 3 *flats* ; F has 1 *flat*.
B has 5 *sharps* ; A has 3 *sharps* ; G has 1 *sharp*.

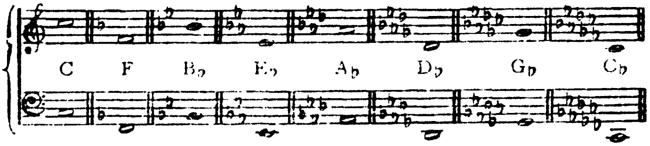
46. In **key-signatures** the *order of sharps is*—F, C, G, D, A, E, B ; the *order of flats is*—B, E, A, D, G, C, F.

47. **Here is a table of key-signatures, showing in each case the key-note or tonic of the scale :—**

(i.) Major key-signatures with sharps :—



(ii.) Major key-signatures with flats :—



In a major key-signature with sharps, the key-note is a semitone above the last sharp. In a major key-signature with flats, the key-note is a fourth below the last flat.

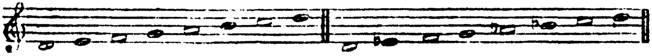
48. Sometimes (at Examinations) candidates are asked **to write major scales beginning and ending upon other degrees than the tonic** ; such as Mediant, Sub-dominant, etc.

Students will therefore find it very useful practice to write out a series of eight notes, beginning upon any degree of the Scale of C major they may choose—see Fig. 19 (*a*)—and then, by adding the necessary accidentals, they can alter this series of eight notes into a major scale, beginning and ending upon some degree other than its own tonic—see Fig. 19 (*b*), (*c*), (*d*), (*e*), (*f*) :—

Fig. 19.

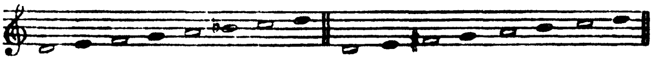
(*a*) Scale of C, beginning on its *Super-tonic.*

(*b*) Scale of E♭, beginning on its *Leading-note.*



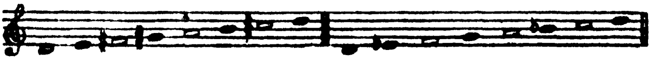
(*c*) Scale of F, beginning on its *Sub-mediant.*

(*d*) Scale of G, beginning on its *Dominant.*



(*e*) Scale of A, beginning on its *Sub-dominant.*

(*f*) Scale of B♭, beginning on its *Mediant.*



49. **Minor scales** are connected with major scales **in two** ways :—

(i.) They can begin on the *same tonic*, but have different key-signatures.

(ii.) They can have the *same key-signature*, but begin on different tonics.

50. A minor scale which begins on the same tonic as any given major scale, is called the **tonic minor** of the latter.

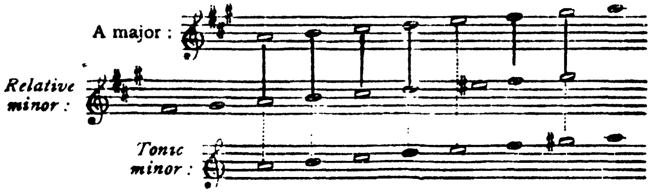
51. The signature of the tonic minor has always three sharps less or three flats more than the signature of its tonic major scale.

52. A minor scale which has the same key-signature as any given major scale, is called the **relative minor** of the latter.

53. A relative minor scale begins three semitones below the tonic of its relative major scale, *i.e.*, upon the 6th degree or sub-mediant of the latter.

54. Every major scale has **six notes in common** with its *relative* minor scale, and **five notes in common** with its *tonic minor scale* :—

Fig. 20.



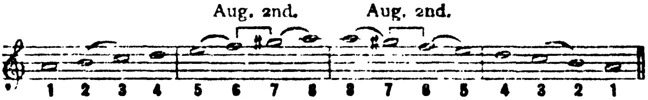
55. **Every minor scale can be used in two different forms** :—

(i.) **The Harmonic.**
(ii.) The Melodic.

56. In the Harmonic form the semitones occur between the 2nd and 3rd, the 5th and 6th, and the 7th and 8th degrees, both ascending and descending. An **augmented 2nd** occurs between the 6th and 7th degrees ; this is an interval or distance of three semitones, and is accordingly one semitone wider than a whole tone :—

Fig. 21.

A minor, relative to C major.



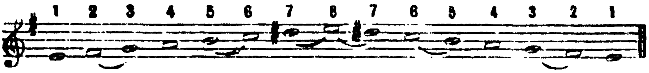
57. In writing the Harmonic form of any minor scale, we should take care that the 7th degree (or leading-note) is always indicated by an *accidental.* This does not make the scale chromatic, because no two of its degrees bear the same letter-name; yet the leading-note itself must be regarded as a ***chromatic note,*** since it is foreign to the key-signature—see § 36. The 3rd and 6th degrees of the Harmonic Minor Scale are both a semitone lower than the 3rd and 6th degrees of the major scale, which begins on the same tonic.

58. Fig. 22 gives the Harmonic form of every minor scale with sharps :—

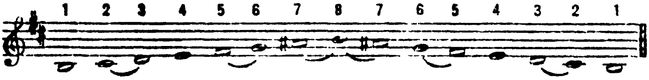
Fig. 22.

Minor Scales with Sharps—" Harmonic form."

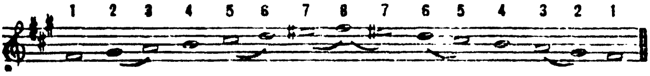
E minor, relative to G major.



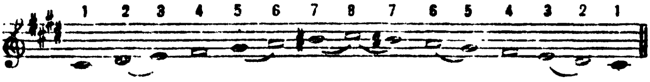
B minor, relative to D major.



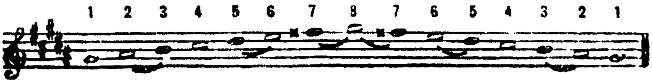
F♯ minor, relative to A major.



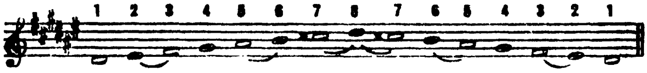
C♯ minor, relative to E major.



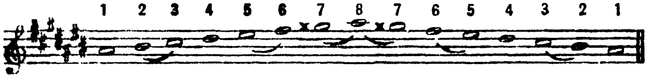
G♯ minor, relative to B major.



D♯ minor, relative to F♯ major.



A♯ minor, relative to C♯ major.



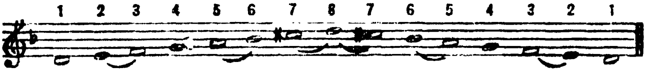
On looking at the signatures of minor keys with sharps, it should be noticed that the **key-note** is always ***a whole tone below the last sharp*** (which is the super-tonic of the scale).

59. Fig. 23 gives the Harmonic form of every minor scale **with flats**:—

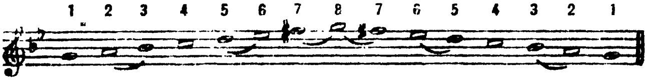
Fig. 23.

Minor Scales with Flats—"Harmonic form."

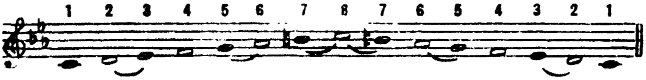
D minor, relative to F major.



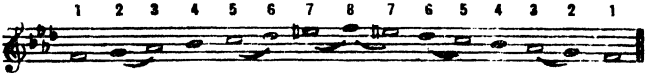
G minor, relative to B♭ major.



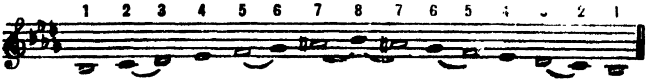
C minor, relative to E♭ major.



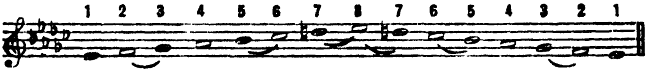
F minor, relative to A♭ major.



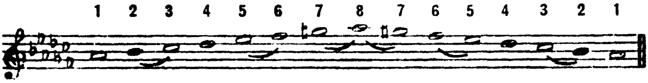
B♭ minor, relative to D♭ major.



E♭ minor, relative to G♭ major.



A♭ minor, relative to C♭ major.

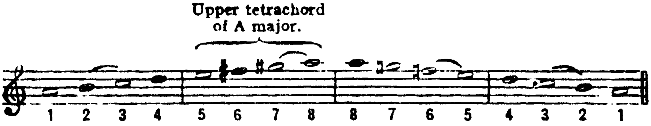


On looking at the **signatures of minor keys with flats**, it should be noticed that the **key-note** is always *the third note above the last flat* (which is the sub-mediant of the scale).

60. To avoid the augmented interval between the 6th and 7th degrees of the Harmonic Minor Scale, the **Melodic Minor Scale** has the 6th degree *raised* in ascending, and the 7th and 6th both *lowered* in descending.

Fig. 24.

A minor, relative to C major.



61. In the **Melodic form** the semitones occur between the 2nd and 3rd, and the 7th and 8th **ascending**; and between the 6th and 5th, and the 3rd and 2nd **descending**.

62. In writing the Melodic form of any minor scale, take care that the 6th and 7th degrees ascending are always indicated by accidentals.

63. Accidentals are not required for the descending form, unless to contradict the previous sharpening of these degrees in the ascending form.

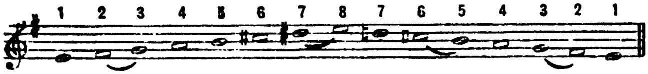
64. Observe that the *upper* tetrachord of the melodic form of a minor scale is exactly the same as the upper tetrachord of the major scale which begins on the same tonic. But in the *lower* tetrachord the 3rd degree of a minor scale (the mediant) is *always* one semitone lower than the mediant of the major scale beginning on the same tonic.

65. Fig. 25 gives the Melodic form of every minor scale with sharps :—

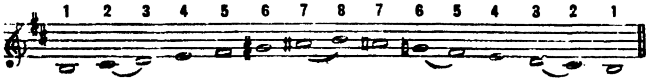
Fig. 25.

Minor Scales with Sharps—" Melodic form."

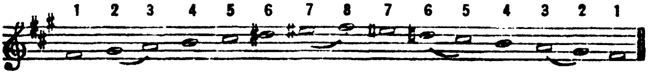
E minor, relative to G major.



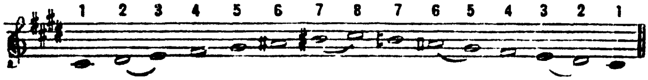
B minor, relative to D major.



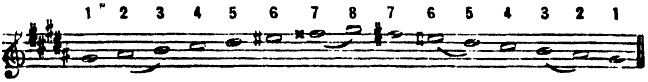
F♯ minor, relative to A major.



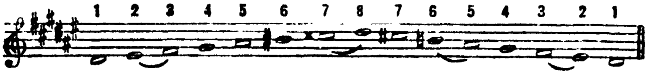
C♯ minor, relative to E major.



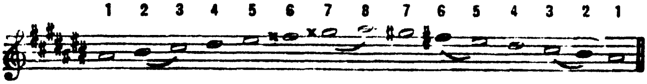
G♯ minor, relative to B major.



D♯ minor, relative to F♯ major.



A♯ minor, relative to C♯ major.

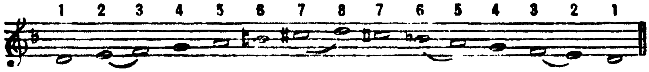


66. Fig. 26 gives the Melodic form of every minor scale with flats :—

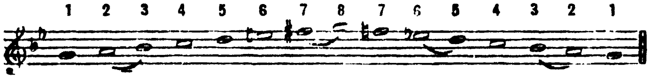
Fig. 26.

Minor Scales with Flats—"Melodic form."

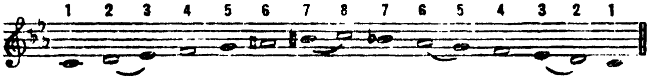
D minor, relative to F major.



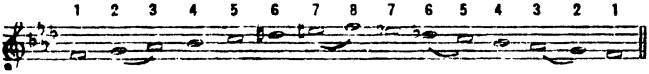
G minor, relative to B♭ major.



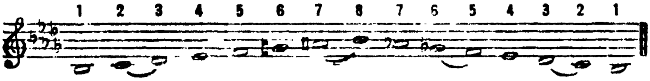
C minor, relative to E♭ major.



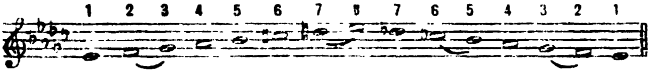
F minor, relative to A♭ major.



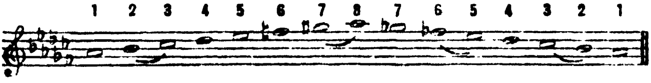
B♭ minor, relative to D♭ major.



E♭ minor, relative to G♭ major.



A♭ minor, relative to C♭ major.



In 18th-century music (by Corelli, Geminiani, Handel, and others) we often see the last sharp or flat omitted from a key-signature. In this case an accidental was inserted when either the leading-note of a major key with sharps, or the sub-mediant of a minor key with flats, was required. Minor keys with sharps, and major keys with flats, were written with *complete* key-signatures.

Students should now practise writing Minor Scales, beginning and ending upon other notes than the Tonic, as shown in § 48, in connexion with Major Scales.

CHAPTER IV.

THE NOTATION OF THE CHROMATIC SCALE.

67. The **Chromatic Scale** proceeds by **semitones** only.

68. There are two kinds of **semitones**: the Diatonic and the Chromatic.

69. The two notes which form a **Diatonic Semitone** have *different letter-names*, as C͡D♭; F♯͡G; E͡F. Such a semitone can occur between two successive degrees of a Diatonic as well as of a Chromatic Scale.

70. The two notes which form a **Chromatic Semitone** have the *same letter-name*; but one or both of the notes will have an accidental, as C♯͡C♮; B͡B♭. *Such a semitone can only occur in a Chromatic Scale.*

71. Within the octave of any note on the piano keyboard there are twelve sounds, seven of which occur in the Major Scale, which has that note for its tonic. We have now to learn how to write the other five.

72. There are two ways of writing the Chromatic Scale the **Harmonic** way and the **Melodic** way.

73. At an Examination always write the *Harmonic* way, unless the other is asked for.

74. When giving the **Harmonic Chromatic Scale** of any note, first write the **Major Scale** which begins on that note, leaving room for the extra five degrees to be written. Let Roman numerals stand for the degrees of the Major Scale:—

I. II. III͡.IV. V. VI. VII͡.VIII.
semitone *semitone*

We should be careful to write III͡.IV. and VII͡.VIII. **close together,** so that no other note can come between them.

There are two methods by which we can next proceed.

First Method: *Flatten* (by means of a ♭ or ♮) II., III., VI., and VII. *Sharpen* IV. (by means of a ♯ or ♮).

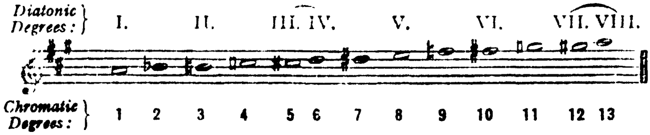
The Harmonic Chromatic Scale will then appear thus:—

I., ♭2, ♮II., ♭3, ♮III͡.IV., ♯4, V., ♭6, ♮VI., ♭7, ♮VII͡.VIII.

The five Arabic numerals indicate the extra notes added to make the semitone steps of the Chromatic Scale, **in those** places where the Major Scale proceeded by tones.

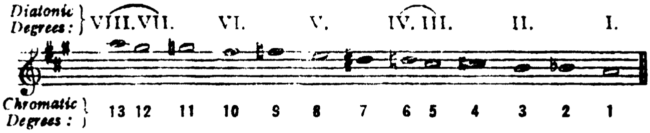
Put into musical notation, this Harmonic Chromatic Scale with a **sharp signature** will appear thus :—

Fig. 27.



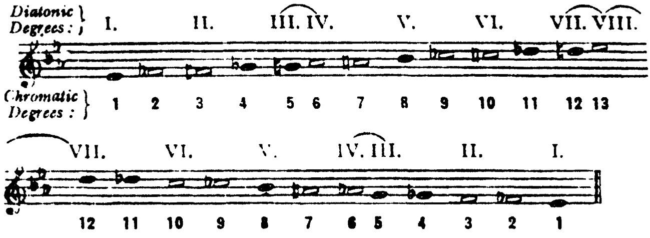
The **descending** form of the **Harmonic** Chromatic Scale, although the same in notation, will not require as **many** accidentals as the ascending form :—

Fig. 28.



With a **flat** signature, the Harmonic Chromatic Scale will appear thus :—

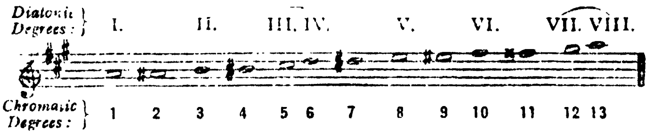
Fig. 29.



Second Method : Write the letter-names of the Tonic and Dominant (I. and V.) of the Diatonic Scale *once only*, and *do not write any other letter-name more than twice*. Observe that in Fig. 27 there is only *one* A (tonic), and only *one* E (dominant) ; but each of the other letter-names appear *twice*. Thus there are two B's, two C's, two D's, two F's, and two G's. The Harmonic Chromatic Scale has the same notation ascending and descending. Sometimes at an Examination the key-signature is given, sometimes it is not. In any case, the II., III., VI., and VII. degrees of the Diatonic Scale will require accidentals to contradict the preceding chromatic notes.

75. The **ascending form** of the **Melodic Chromatic Scale** is obtained by the insertion of only five accidentals. With a major key-signature, the mediant and leading-note (the degrees affected by the last two *sharps* in the signature) are unaltered. The remaining five degrees of the Diatonic Major Scale are first used without accidentals, but are afterwards raised a chromatic semitone by a ♯ or X (or a ♮ in keys with flats) :—

Fig. 30 A.

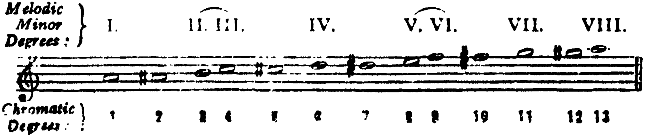


Be most careful when you write the degrees of the Major Scale to place the III. IV. and VII. VIII. degrees so close together that it is impossible to write another note between them.

In writing the **Ascending form of the Melodic Chromatic Scale with a major signature,** *raise* the following degrees I., II., IV., V., VI., as in Fig. 30 A.

In writing the **Ascending form of the Melodic Chromatic Scale with a minor signature,** write first the degrees of the Descending Melodic Minor Scale—*i.e.*, exactly according to the key-signature, and then *raise* I., III., IV., VI., and VII., as in Fig. 30 B.

Fig. 30 B.



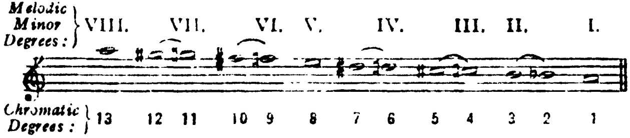
With a minor key-signature the Super-tonic and Dominant (the degrees affected by the last two *sharps* in the signature) are unaltered. The remaining five degrees of the *descending* form of the Melodic Minor Scale are first used without accidentals, but are afterwards raised a chromatic semitone by a ♯ or x (or a ♮ in keys with flats).

76. The **Descending form of the Melodic Chromatic Scale** is exactly the same as the descending form of the Harmonic Chromatic Scale. Thus:

With a Major key-signature, write exactly as Fig. 28.

With a Minor key-signature, so :—

Fig. 30c.



In Examinations the Melodic Chromatic Scale is most frequently asked to be written with a given key-signature (major or minor).

CHAPTER V.

TIME—RELATIVE DURATION OF SOUNDS—NOTES—RESTS—DOTS—TIES—STACCATO MARKS—THE PAUSE—GROUPING OF NOTES.

As most of the subjects mentioned above have already been fully explained in the *Preparatory Text-Book* (Chapters V. and VI.), only a brief summary of them is needed in this place.

77. **Notes** indicate *sound*; **rests** indicate *silence*.

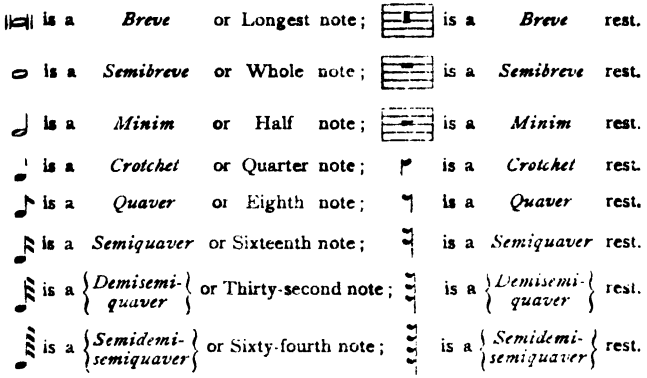
78. The **time** (or duration) of **notes** is expressed by their various *shapes*.

79. The **time** (or duration) of **rests** is indicated by their various shapes; and also, in two cases (Semibreve and Minim), by their position on the staff.

80. **Fig. 31 shows the shapes, etc.,** of the various notes

and rests, beginning with the longest note or Breve, and ending with the shortest note or Semidemisemiquaver :—

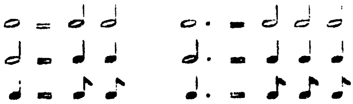
Fig. 31.



𝅜	is a	*Breve*	or Longest note;		is a	*Breve* rest.
𝅝	is a	*Semibreve*	or Whole note;	𝄻	is a	*Semibreve* rest.
𝅗𝅥	is a	*Minim*	or Half note;	𝄼	is a	*Minim* rest.
♩	is a	*Crotchet*	or Quarter note;	𝄽	is a	*Crotchet* rest.
♪	is a	*Quaver*	or Eighth note;	𝄾	is a	*Quaver* rest.
𝅘𝅥𝅯	is a	*Semiquaver*	or Sixteenth note;	𝄿	is a	*Semiquaver* rest.
𝅘𝅥𝅰	is a	*Demisemi-quaver*	or Thirty-second note;	𝅀	is a	*Demisemi-quaver* rest.
𝅘𝅥𝅱	is a	*Semidemi-semiquaver*	or Sixty-fourth note;	𝅁	is a	*Semidemi-semiquaver* rest.

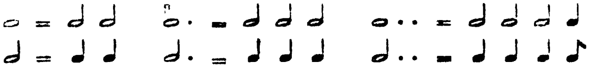
Every kind of note and rest is exactly half the length of the next longer note and rest, and twice the length of the next shorter note and rest.

81. A **Dot** after a note makes that note half as long again; the note is then equal in value to *three* of the next shorter notes (instead of two), thus :—



and so on.

A second dot represents half the value of the first dot, thus :—



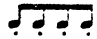
82. A Tie or Bind is a curved mark, joining together two notes of the same pitch. It adds the value of the second note to the first, thus :— ♩‿♩ = four quavers; 𝅗𝅥‿♪ = **five quavers ;** 𝅗𝅥.‿𝅘𝅥𝅯 = **thirteen semiquavers.**

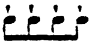
83. **Dots** affect the time-value of **rests** in the same way that they affect the time-value of *notes*. Rests are more often lengthened by the addition of other *shorter* rests.

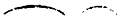
84. **Ties** are never used to connect rests, they only connect *notes*.

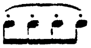
85. **Staccato** means *cut off*, or *detached*.

86. **Legato** means *bound* together, or played *smoothly*.

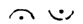
87. **Staccato** is indicated by the word itself, or more usually by dots placed *above* or *under* the notes: 

88. **Staccatissimo** (*very* short or detached) is indicated by spikes or dashes *above* or *under* the notes: 

89. **Legato** is indicated by the word itself, or by a curved line, called a slur, which may be long or short 

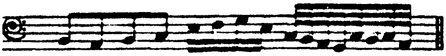
90. When Staccato and Legato marks are *combined*, the music must be played not quite smoothly, yet not too detached:  This combination of marks is sometimes called **slurred staccato.**

91. The **slur** is never combined with staccatissimo marks.

92. A **pause** (French, *Couronne*; Italian, *Fermata*)  means that the note or rest over or under it must be *prolonged indefinitely*, at the pleasure or will of the performer or conductor.

93. Quavers, semiquavers, or demisemiquavers, are often written **in groups.** When this is so, it is usual to join their hooks:—

Fig. 32.



94. **The grouping of notes** is often a useful guide to the position of **accent** or stress, since the first note of a group is generally more marked, or more heavily accented, than any of the other notes in the same group.

CHAPTER VI.

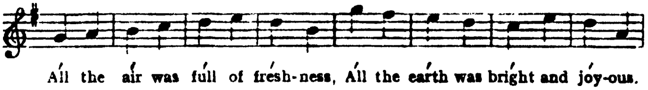
TIME-SIGNATURES AND ACCENT—BARS—RHYTHMICAL GROUPING OF NOTES (REGULAR AND IRREGULAR)—SYNCOPATION.

95. In listening to poetry we hear a succession of regularly occurring accents :—

"Áll the áir was fúll of fréshness,
Áll the eárth was bríght and jóyous." (Longfellow's *Hiawatha.*)

In fitting words to music (or in writing instrumental music to which no words are sung), the accents are indicated by **upright lines drawn through the staff.** These lines, which are called bars, are placed immediately *before* a strongly accented note :—

Fig. 33.

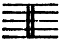

Áll the áir was fúll of frésh-ness, Áll the eárth was bríght and jóy-ous.

96. Accents may be **strong,** *weak*, or medium. Fig. 33 consists entirely of strong and weak accents used alternately.

97. A *weak* accent is sometimes called a **non-accent.**

98. The word **bar** also means the music contained between two bar-lines, although this space so *measured off* by the bar-lines is sometimes called a **measure.**

99. The **use of bar-lines** is to measure off the music into small equal portions, in order to show the strong accents, and to enable the performer to *count the time*, or a conductor to *beat the time*.

100. A **double bar**  marks the end of a piece, or of an important section of a piece. It has *nothing* to do with time or with rhythm, and may therefore be placed in any part of a measure.

101. The grouping of notes within bar-lines is called **Rhythm.**

102. The time-value or standard of bar-measurement is shown by figures which immediately follow the key-signature These figures are called the **time-signature.**

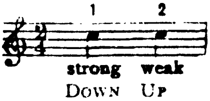
103. A bar may contain two, three, or four **beats.** A **beat** is shown by a movement of the conductor's stick—up, down, or sideways.

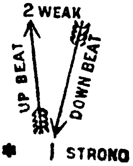
104. Rhythms (or groups) of two beats in the bar are called **Duple.** Rhythms (or groups) of three beats in the bar are called **Triple.** Rhythms (or groups) of four beats in the bar are called **Quadruple.**

105. If each beat can be divided into two halves, the time is said to be **Simple.**

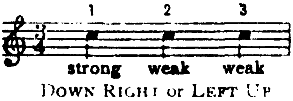
106. When each beat can be divided into three parts, each of which is called a "pulse," the time is said to be **Compound.** In Compound time the *beat* consists of a **dotted note**; the *pulse* consists of a note the time-value of which is one-third of the beat.

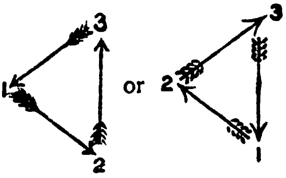
107. **Simple Duple Time** is accented, beaten, and counted thus:—



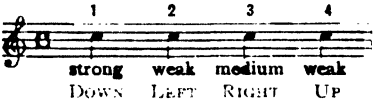


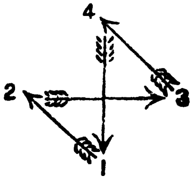
108. **Simple Triple Time** is accented, beaten, and counted thus:—



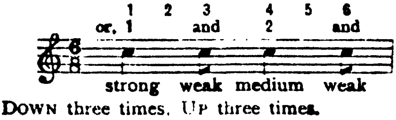


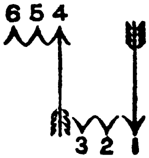
109. **Simple Quadruple Time** is accented, beaten, and counted thus:—





110. **Compound Duple Time** is accented, beaten, and counted thus:—





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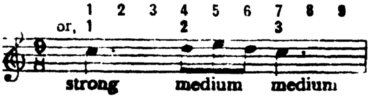
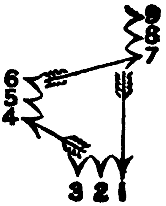
* In all these time-illustrations the *point* of the arrow indicates the *end* of the beat.

In Compound Duple Time there are two *beats* and six *pulses*. *A pulse is therefore one-third of a beat*, and in slow time is indicated by a separate short movement of the conductor's stick—as shown in the adjoining example.

111. **Compound Triple Time** is accented, beaten, and counted thus :—





DOWN three times, RIGHT or LEFT three times, UP three times.

In Compound Triple Time there are three *beats* and nine *pulses*.

112. **Compound Quadruple Time** is beaten in the manner shown in § 109, but DOWN three times, LEFT three times, RIGHT three times, UP three times.

In Compound Quadruple Time there are four *beats* and twelve *pulses*.

113. When the **upper figure** of a time-signature is **2**, the time is Simple *Duple* ; when it is **3**, the time is Simple *Triple* ; when it is **4**, the time is Simple *Quadruple*.

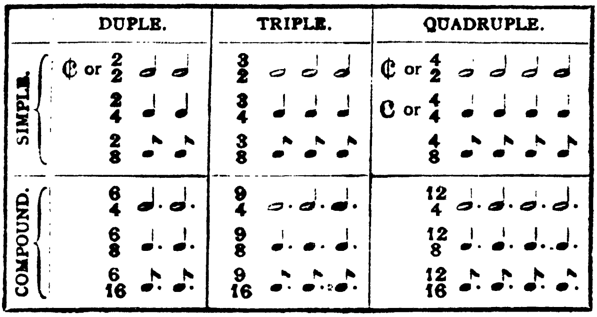
114. When the **upper figure** of a time-signature is **6**, the time is Compound *Duple* ; when it is **9**, the time is Compound *Triple* ; when it is **12**, the time is Compound *Quadruple*.

115. The **lower figure** of a *Simple* time-signature shows the value of each beat in a bar ; thus **2** = minims, **4** = crotchets, **8** = quavers.

116. The **lower figure** of a *Compound* time-signature shows the value of a *pulse*—that is, one-third of the dotted note of which each beat consists ; thus **4** = crotchets, **8** = quavers, **16** = semiquavers.

117. The following are the time-signatures in general use :—

Fig. 34.

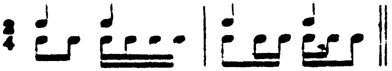

DUPLE.
TRIPLE.
QUADRUPLE.
SIMPLE.
COMPOUND.
𝄵 or 2/2
2/4
2/8
3/2
3/4
3/8
𝄵 or 4/2
𝄴 or 4/4
4/8
6/4
6/8
6/16
9/4
9/8
9/16
12/4
12/8
12/16

118. Simple Quadruple time, with four **crotchets in a bar** ($\frac{4}{4}$), is very often called **Common time.**

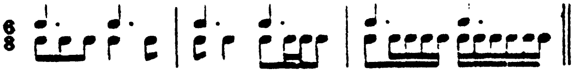
The old-fashioned sign 𝄴, which once indicated $\frac{4}{4}$ time, is now rapidly becoming obsolete. So too is the equally vague sign 𝄵, which was once used to indicate both two half-notes 𝅗𝅥 𝅗𝅥, or two whole notes 𝅝 𝅝, in a bar. The former was called **Alla breve** time; the latter was sometimes known as **Alla Cappella** (Church Time).

119. Instances of $\frac{5}{4}$ and of $\frac{7}{4}$ time are occasionally met with. These have respectively five and seven crotchets in a bar.

120. Every beat of **Simple** time can be subdivided into a **group of notes,** each group being equal in time to a simple or *undotted* **beat-note**:—



121. Every beat of **Compound** time can be subdivided into a **group of notes,** each group being equal in time to a compound or *dotted* beat-note:—



122. **Every beat-group of notes in a compound time is equivalent to a complete bar of *simple* triple time. Thus, each bar of $\frac{6}{8}$ time resembles two bars of $\frac{3}{8}$ time in succession.**

123. In **slow compound Duple time** it is sometimes convenient to count six. These **six** counts fall into **two** groups of *three* each: 1 2 3, 4 5 6; 4 is in this case a *medium* accent.

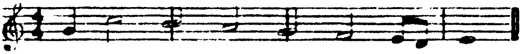
124. In **slow simple Triple time** it is also convenient to count six. These six counts fall into **three** groups of *two* each: 1 2, 3 4, 5 6; 3 and 5 are in this case medium accents.

125. The rhythm of a bar of triple time, or of any single group of compound time, is *more natural* as 𝅗𝅥 ♩ or ♩ ♪, than as ♩ 𝅗𝅥 or ♪ ♩. The latter groups may be regarded as *syncopated.*

126. **Syncopation** is the term used to express *disturbed accent.* The *weaker* beats of every measure may be occasionally made emphatic at the pleasure of the composer. This is usually done in **simple time** by *tying* the note on a *weak* beat to the next note on either a **strong** or a medium beat. The naturally accented note not being sounded afresh, the ear requires that the note to which it is tied should receive more than the ordinary accent, and be emphasized. Fig. 35 exhibits the ancient and modern methods of writing the same syncopated passage.

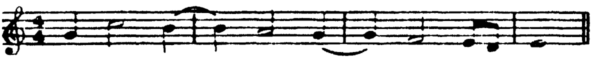
Fig. 35.

Ancient Method.

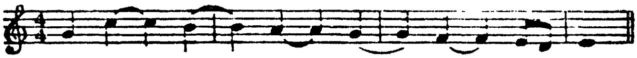


This method seems to have occasioned the use of the word *Syncopation*, which means, in musical language, *cutting into two parts.*

Modern Method.

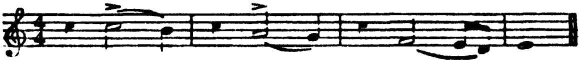


or :—



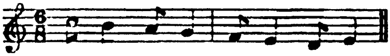
The accent may be broken by *rests* instead of tied notes as in Fig. 36 :—

Fig. 36.



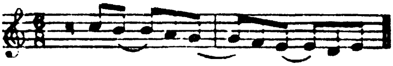
127. In **compound time** syncopation is sometimes effected by writing a group of two unequal notes, and causing the shorter of the two to be heard first :—

Fig. 37.



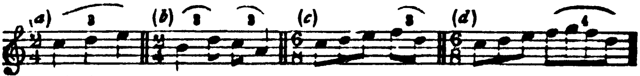
It can also be effected by tied notes :—

Fig. 38.

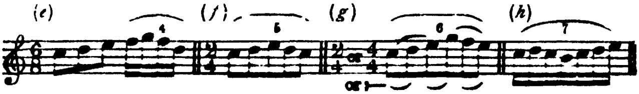


128. Sometimes notes are **irregularly grouped.** Occasionally *three* notes of equal value are written to be performed in the time of *two* of the same kind, a figure 3 being placed over or under the group, which is called a **triplet.** Fig. 39 (*a*). Sometimes two of the notes of a triplet may be sustained as *one*. Fig. 39 (*b*).

Fig. 39.



Triplet. *Triplet groups.* *Duplet.* *Quadruplet.*



Quadruplet. *Quintolet.* *Sextolet.* *Septolet.*

129. A **duplet** is—in compound time—a group of two notes played in the time of three of the same kind, the dotted beat being for the moment treated as though it were simple, *i.e.*, undotted. Fig. 39 (*c*).

130. A **quadruplet** is—in compound time—a group of four notes played in the time of three. Sometimes the four notes are written in the time-value of the three notes they

temporarily displace, as in Fig. 39 (*d*); occasionally they are written in the time-value of those four notes which would together make up the value of the undotted beat-note they actually represent, as in Fig. 39 (*e*).

131. A **quintolet** is a group of five notes played in the time of four of the same kind. Fig. 39 (*f*).

132. A **sextuplet** or **sextolet** is a group of six notes formed either by the sub-division of a triplet, or by combining two triplets into one group. Both forms are played in the time of four ordinary notes of the same kind as those of the example itself. Fig. 39 (*g*).

133. A **septolet** or **septimole** is a group of seven notes played in the time of six or eight of the same kind. Fig. 39 (*h*).

A knowledge of Harmony is necessary for determining whether a *quintolet* should be played as 2 + 3, or 3 + 2; a *sextolet* as 3 + 3, or 2+2+2; or a *septolet* as 3 + 4, or 4 + 3.

CHAPTER VII.

DIATONIC INTERVALS WITHIN THE OCTAVE DERIVED FROM MAJOR SCALES ONLY—INVERSIONS OF THESE INTERVALS.

134. An **interval** is the difference in pitch, or *scale-distance*, between any two sounds.

135. A **melodic interval** = two sounds struck and heard in *succession*, one after the other. A **harmonic interval** = two sounds struck and heard *together*.

136. Intervals have **numerical** and **qualifying** names.

137. The **numerical name** of an interval depends upon the number of lines and spaces of the staff covered by the interval. This number includes the staff-positions (*viz.*, lines or spaces) occupied by the two notes forming the interval. Thus, an 8ve includes the line and space in which the upper and lower notes themselves stand and the three

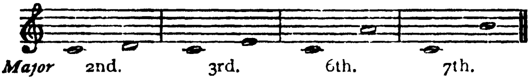
lines and three spaces between—*eight* staff-positions in all. Accidentals do not affect the numerical name of an interval.

138. The **qualifying name** of an interval depends upon its absolute width, *i.e.*, upon the number of semitones it contains.

139. The *ascending* major scale is the **standard of measurement** for finding the qualifying name of an interval; but the student is advised to learn *by ear* the effects produced by the different qualities of intervals.

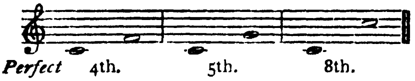
140. The intervals between any note and the 2nd, 3rd, 6th, and 7th degrees of the major scale which begin on that note are **major** :—

Fig. 40.



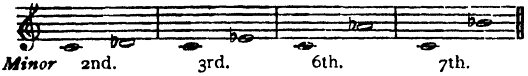
141. The intervals between any note and the 4th, 5th, and 8th degrees, both of the major and minor scales which begin on that note, are **perfect** :—

Fig. 41.



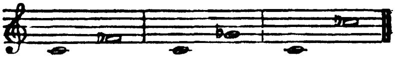
142. An interval is called **minor** when it is a chromatic semitone smaller than a major interval. It must be observed that the notes forming the minor interval still retain the same *alphabetical names* as those of the major interval. Compare Fig. 42 with Fig. 40 :—

Fig. 42.



143. If a perfect interval be made smaller by a chromatic semitone, *the same alphabetical names being retained*, the interval then becomes **diminished** :—

Fig. 43.



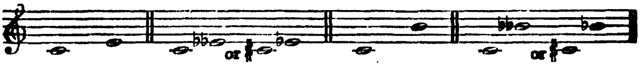
Diminished 4th. 5th. 8th.

The diminished 5th occurs in every major scale between the leading-note and the sub-dominant above it in the next octave of the scale. The diminished 4th does not belong to any major scale.

The diminished 8ve being the " enharmonic equivalent " of a major 7th does not belong to either a diatonic or a chromatic scale. It is not therefore in general use.

If a *major 3rd or 7th* be made smaller by *two* semitones, *the same alphabetical names being retained*, the interval then becomes **diminished** :—

Fig. 44.

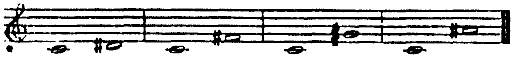


Major 3rd. *Diminished 3rd.* *Major 7th.* *Diminished 7th.*

Neither the diminished 3rd nor the diminished 7th can be found between any two degrees of a major scale.

144. If a *major* 2nd or 6th, or a perfect 4th or 5th, be made *larger* by a chromatic semitone, an **augmented interval** is formed :—

Fig. 45.

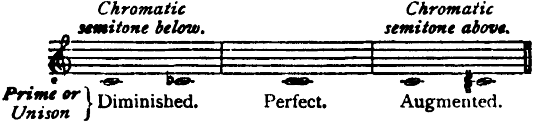


Augmented 2nd. 4th. 5th. 6th.

Of these four augmented intervals exemplified in Fig. 45, only one—the augmented 4th—is to be found in the major scale, where it exists between the sub-dominant and the leading-note above.

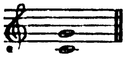
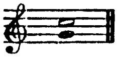
145. Though not (in its perfect shape) an *interval*, the **prime or unison** (a duplication of the same note) must be considered here, on account of its diminished and augmented conditions :—

Fig. 46.



No chromatic semitone can occur between any two degrees of a major scale, since no two degrees of any diatonic scale can possibly bear the same alphabetical name See §§ 69 and 70.

146. Intervals may be **inverted** by placing the lower note an octave higher, or the upper one an octave lower :—

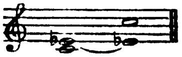
Thus  inverted is 

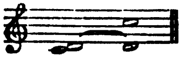
By inversion, a different interval is produced by notes of the same name—a fifth becomes a fourth, an octave becomes a unison, etc.

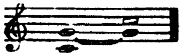
147. **How to find the inversion of an interval.** By subtracting the number of the given interval from 9, the remainder gives the inversion—thus, to find the inversion of a 3rd, subtract 3 from 9, and the remainder, 6, will show that the inversion of a 3rd is a 6th.

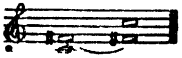
By adding together the numerical name of any interval less than an 8ve and that of its inversion, the total will always be 9. This total is 9 (and not 8), because the note which is unaltered in pitch gets counted *twice*.

148. **The quality of an interval is changed by inversion,** with the exception of perfect intervals, which remain perfect. Major intervals become minor, and minor become major ; augmented become diminished, and diminished augmented :—

Thus a minor 3rd will become a major 6th, 

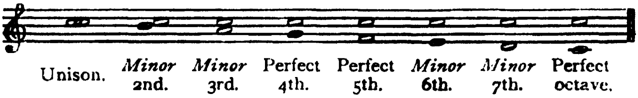
„ major 2nd „ „ minor 7th, 

„ perfect fifth „ „ perfect 4th, 

„ an augmented 4th „ „ diminished 5th, 

149. By the same law of inversion, the intervals between the upper tonic and the notes of the **descending major scale** are either *minor* or perfect. In the ascending major scales these intervals were either *major* or perfect.

Fig. 47.



150. Examination questions on intervals take various forms. Candidates may be asked :—

(i.) To state the numerical and qualifying names of a given interval.

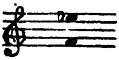
(ii.) To write a certain interval *above* a given note.

(iii.) To write a certain interval *below* a given note.

(iv.) To write certain intervals which belong to given keys.

(v.) To write the *inversion* of any given interval.

Hint I.—**How to find the numerical and qualifying names of a given interval.** First count the number of lines and spaces covered by the interval set, taking no account of any accidental which may be prefixed to either or both of the given notes. Ascertain the qualifying name of the plain interval *without accidentals*, by regarding the upper note as one of the degrees of the diatonic major scale which begins on the lower note. Then ascertain how many chromatic semitones have to be added or subtracted from this result by the nature of the accidentals used.

For example, suppose  is the given interval. Without an accidental this would be a major 7th, since E♮ is the seventh degree of the major scale of F. The ♭ to the E reduces the width of the interval by a chromatic semitone. By § 143 any interval which is a chromatic semitone less than major is *minor*. Consequently the given interval is a minor 7th.

Hint II.—**How to find any interval above a given note.** First write the given note without an accidental (should there be one). Then write above it, in the correct line or space, the bare note required by the numerical name of the given interval. Prefix the accidental to the lower note (if there is one given in the question). Consider this *lower note* *as the tonic of its own major scale*, and then, if necessary, raise or lower the upper note to obtain the quality of the interval asked for.

For example, suppose you are asked to write the augmented 4th above A♭. Write A♮ on the staff, and above it the fourth note D♮. This will be a perfect 4th, the sub-dominant of A major. Prefix the ♭ to the given A. The lowering of this note by a chromatic semitone alters the perfect 4th into an augmented 4th, which is the interval required.

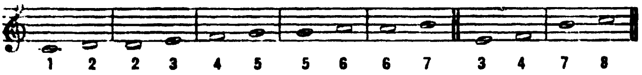
Hint III.—**How to write any interval below a given note.** First write the given note without an accidental. Then below it, in the correct line or space, the bare note required by the numerical name of the given interval. Prefix the accidental to the upper note (if there is one given in the question). Consider this *upper note as the upper tonic of its own major scale* (as shown in Fig. 47), and then, if necessary, raise or lower the other note to obtain the quality of the interval asked for.

For example, suppose you are asked to write the diminished 5th below D♯. Write D♮ on the staff, and below it the fifth note, G♮. This will be a perfect 5th, since G is the sub-dominant (*i.e.*, perfect 5th below D). Prefix the given sharp to D. This makes the interval an augmented 5th. A diminished 5th being two chromatic semitones less than an augmented 5th, the lower note G will require a double sharp to be prefixed, in order to make the interval below the given note D♯ a diminished 5th.

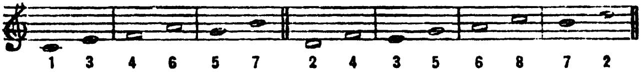
151. **Diatonic intervals** are those which lie between any two notes of a diatonic scale. The **intervals contained in the major scale** must now be learnt, and be afterwards re-written in other keys than that of C.

The following intervals are contained in the Major Scale of C:—

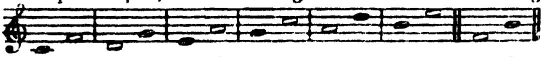
Five major 2nds, each containing two semitones. Two minor 2nds or semitones.



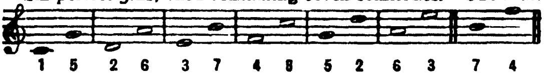
Three major 3rds, each containing four semitones. Four minor 3rds, each containing three semitones.



Six perfect 4ths, each containing five semitones. One *augmented* 4th, containing three whole tones.

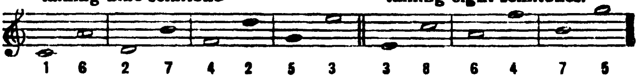


Six perfect 5ths, each containing seven semitones. One *diminished* 5th, containing six semitones.



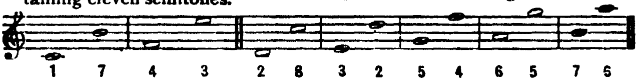
Four major 6ths, each containing nine semitones.

Three minor 6ths, each containing eight semitones.



Two major 7ths, each containing eleven semitones.

Five minor 7ths, each containing ten semitones.



152. The **augmented 4th** occurs in only one place in the major scale, viz., between the sub-dominant and the leading-note; that is to say, *between the flattest and sharpest notes in the key.* It is often called the **tritone** because of the three whole tones comprised within its limits.

153. Viewed *harmonically*, intervals are either **concords or discords.**

154. A **concord** leaves a *finished, satisfied* effect upon the ear, when the two sounds are heard together; a **discord** leaves an *unfinished, unsatisfied* effect.

A **concord** used melodically is, generally speaking, *easy to sing*; a **discord** used melodically is sometimes *not* easy to sing.

155. There are **two kinds of concords**—Perfect and Imperfect.

156. The **perfect** concords are the prime or unison, the octave, 5th, and 4th. See Figs. 41 and 46.

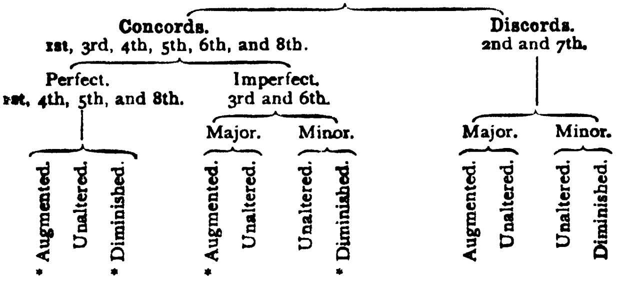
157. The **imperfect concords** are the major and minor 3rd, and the major and minor 6th. See Figs. 40 and 42.

158. The **discords** are the major and minor 2nd and the major and minor 7th (both of which are formed by taking two notes in alphabetical order, as C D, C B, etc.: see Figs. 40 and 42), and all diminished and augmented intervals. See Figs. 43 to 46.

159. **Fig. 48 shows the classification of intervals at a glance** :—

Fig. 48.

Intervals.



The four chromatically altered intervals marked * are *discords*.

Candidates, when *listening* to **ear tests** at a **Practical Examination,** will do well to remember that 3rds and 6ths are *major*, when they respectively sound as the third and sixth degrees of a major scale. But 2nds and 7ths are *major*, and unisons, 8ves, 5ths, and 4ths, are *perfect* when sounded after the tonic in major scales.

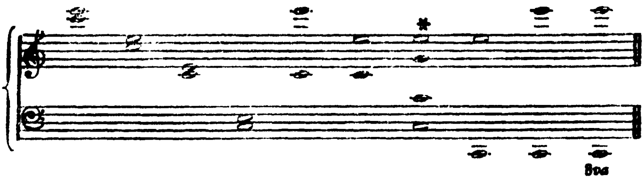
160. A **simple** interval is one which does not exceed the compass of an 8ve.

161. A **compound** interval is one which has a wider compass than an 8ve.

162. A 9th is always regarded in harmony as a compound interval.

163. With the exception of the 9th, compound intervals are generally considered as simple, although they may include an 8ve (or several 8ves) in their compass. Thus, any E would be considered as a 3rd above C, no matter how wide the distance may be between the C and the E above it ; or how many notes may be written *between* the C and E, as at * in Fig. 49 :—

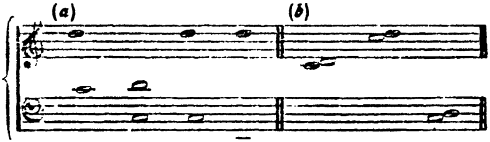
Fig. 49.



All the intervals in Fig. 49 are regarded as 3rds, because the names of the two notes in each are C and E.

164. A 9th may sometimes be regarded as a compound 2nd; but a 2nd can under no circumstances whatever be used for a 9th, in the same way that a 3rd can be used for a 10th.

Fig. 50.



9ths (or compound 2nds). 2nds only.

In the 9th, the upper note is the discord; in the 2nd, the lower note is the discord.

CHAPTER VIII.

TRANSPOSITION OF A GIVEN MELODY FROM TREBLE CLEF TO BASS CLEF, OR *vice versa*—HINTS FOR EXAMINATION CANDIDATES.

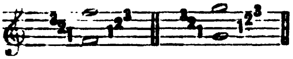
165. Junior Examination Candidates are often asked to re-write a given melody :—

(i.) An octave higher or lower, using the *same* clef.
(ii.) An octave higher or lower, using a *different* clef.
(iii.) Two octaves higher or lower, using a different clef.
(iv.) At the same pitch, using a different clef.

We have already learned (*Preparatory Text-Book*, Chap. III.) how to re-write a melody an 8ve higher or lower, **using the same clef.**

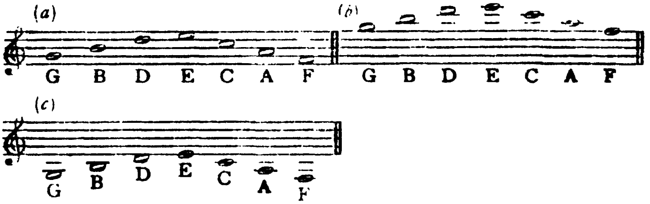
Hint I.—The chief thing to remember is that there are three lines and three spaces between any two notes which lie an octave apart :—

Fig. 51.



Consequently the given passage, Fig. 52 (*a*), will appear an 8ve higher at (*b*), and an 8ve lower at (*c*) :—

Fig. 52.

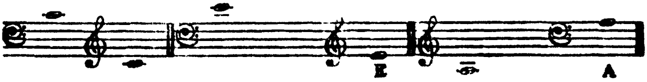


Hint II.—When transposing an octave higher or lower, **using the same clef, all leger lines,** and **spaces between leger lines,** must be counted as if they were lines and spaces of the staff itself.

Hint III.—When transposing an octave higher or lower, **using a different clef,** it may help us if we remember the relative position of Middle C to both clefs. See Fig. 53 (*a*). The second leger line above the Bass staff (E) has exactly the same pitch as the bottom line of the Treble staff—Fig. 53 (*b*) ; and in the same way, the second leger line below the Treble staff (A) has exactly the same pitch as the top line of the Bass staff—Fig. 53 (*c*) :—

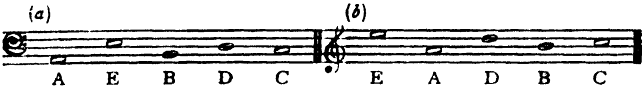
Fig. 53.

(*a*) "Middle C." (*b*) E is the same as :— (*c*) A is the same as :—



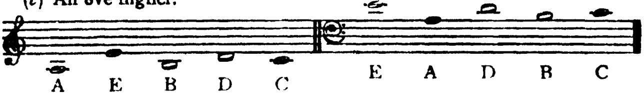
Consequently, the passages, Fig. 54 (*a*) and (*b*), will respectively appear as at (*c*) and (*d*), when transposed an octave, using different clefs :—

Fig. 54.



(*c*) An 8ve higher.

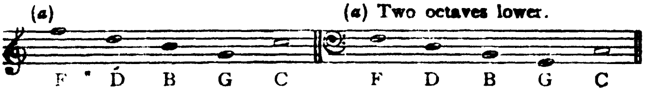
(*d*) An 8ve lower.



Hint IV.—To transpose a melody **two octaves**, higher or lower, using a different clef, is really easier than to transpose it *one* octave. All we have to remember is this :—

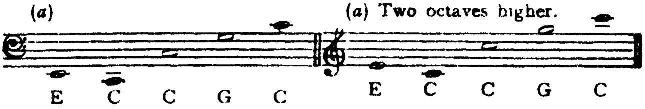
(i.) In changing the clef from Treble to Bass, write the new notes on the next lines or next spaces *below* those occupied by the given notes :—

Fig. 55.



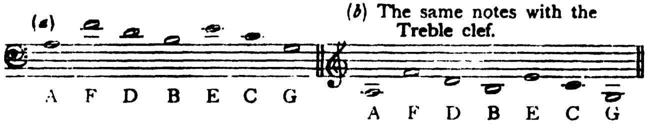
(ii.) In changing the clef from Bass to Treble, write the new notes on the next lines or next spaces *above* those occupied by the given notes :—

Fig. 56.



Hint V.—A correct knowledge of the relative position of Middle C" to both Treble and Bass clefs will also help us very considerably when transposing a melody **from clef to clef, keeping its notes at the same pitch.**

Fig. 57.



(b) The same notes with the Treble clef.

Hint VI.—There are several points of detail connected with **good music-writing,** which candidates would do well to observe :—

(i.) See that the clef is nicely formed.

(ii.) See that the sharps or flats in the key-signature are placed on or in the proper lines and spaces.

(iii.) See that the time-signature is correctly copied, with no line inserted between its two figures.

(iv.) See that the stems of the notes are correctly placed—to the *right* of the notes, if turned up ; to the *left*, if turned down. All notes *below* the middle staff-line have their stems turned *up* ; all *above* the middle staff-line have their stems turned *down*.

(v.) Accidentals are placed *before* the notes to which they refer. No accidental should be omitted.

(vi.) No dot after a note is ever placed upon a line of the staff.

(vii.) A dotted note upon a line has its dot placed in the space *above*, if the next note be higher than the dotted note. The dot is placed in the space *below*, if the next note be lower than the dotted note.

(viii.) Leger lines should be written before the notes are placed upon them. The first leger line should be parallel to the staff, at the same distance from it as the width of the spaces between the lines of the staff. Every fresh leger line should be placed at the same distance from the previous one. Leger lines are only an extension of the five-lined staff.

In connection with Hint IV., it may be remarked that a slower (but perhaps *safer*) method of transposing a melody up or down *two octaves*, is first to transpose it *one* octave in the required direction (according to the directions given in Hint III.), and then to repeat the same process for the *second* octave.

CHAPTER IX.

WORDS AND MARKS INDICATING INTENSITY AND SPEED. METRONOMIC INDICATIONS.

166. Italian words, or their abbreviations, are used to show in a musical composition :—

(i.) **Intensity,** *i.e.*, the degree of tone (loudness or softness) required ;

(ii.) **Speed,** *i.e.*, the time or pace (fast or slow) at which the music is to be taken.

167. The following terms, etc., are used in connection with **fixed degrees of intensity** :—

Pianissimo (*ppp* ; *pp*) =very soft. The utmost degree of pianissimo is sometimes expressed by the word *Estinto* (almost extinguished).

Piano (*p*) =soft ; *Mezzo piano* (*mp*) = half soft, or moderately soft.

Mezza voce (*m v*) =medium tone—literally, half the voice.

Forte (*f*) = loud ; *Mezzo forte* (*mf*) = half loud, or moderately loud.

Fortissimo (*fff* ; *ff*) =very loud.

168. A **gradual increase of tone** is denoted by :—

Crescendo (*cresc.* ; *cres.* ; or <).

169. A **sudden increase of tone** is denoted by :—

Rinforzando (*Rinforz.* ; *rf*) =reinforcing, strengthening, emphasizing.

Sforzando (*sfz* ; *sf*) =forcing the tone with accent. > ∧ are also signs to denote sudden accent.

170. A **gradual decrease of tone** is denoted by :—

Diminuendo (*dim.* ; or >).

Decrescendo (*decres.*) also means a gradual decrease of tone. Other words which have much the same meaning are :—

Mancando =failing, or waning in tone.

Raddolcendo, or *Raddolcente* =becoming gradually softer.

Scemando =diminishing in power.

Smorzando (*smorz.* or *smor.*) =smothering the tone.

Morendo }
Diluendo } =dying away.

171. A **gradual increase of tone and pace combined is** denoted by :—

Incalzando =quicker and louder.

172. A **gradual decrease of tone and pace combined is** denoted by :—

Calando =softer and slower.

Perdendosi =" losing itself "—by getting softer and slower

173. The following terms, etc., are used in connection with **fixed degrees of Speed or Pace :—**

Grave	Extremely slow ; solemn, grave.
Lento	Very slow.
Lentamente	Not as slow as Lento.
Larghissimo	Slower than Largo.
Largo	Broad ; slow ; grand.
Largamente	Broadly ; massively. Not as slow as Largo.
Larghetto	Rather broadly.
Adagissimo	Slower than Adagio.
Adagio	Leisurely slow ; expressively.
Adagietto	Less slow than Adagio.
Andante	Going at an easy (*lit.*, "walking") pace.
Andantino	Not as slow as Andante.
Moderato	Moderate time.
Tempo ordinario	Ordinary time.
Tempo commodo	Convenient, *i.e.*, comfortable time.
Allegretto	Rather quick, but not as fast as Allegro.
Allegro	Quick ; merry ; gay.
Allegramente	A moderate Allegro.
Allegrezza	Joyously.
Vivace	Brisk ; lively—very similar to Allegro, with which it is sometimes combined.
Vivacemente	Rather lively.
Vivacissimo	Extremely lively (very much like Presto).
Presto	Very quick.
Prestissimo	Quicker than Presto ; as quickly as possible.
Prestissimamente	

Other words which indicate a more or less fixed degree of pace are :—

Tosto = quick ; rapid.
Celere = quick ; nimble.
Veloce = swiftly.

174. A **gradual quickening of the pace** is denoted by :—

Accelerando (***accel.***) = getting gradually faster.
Calcando = hurrying the time.
Incalzando = quicker ***and louder.***
Stringendo (***string.***)
Stretto
Più stretto
Affrettando (***affret.***) = pressing onwards ; "pulling closer together," in the sense of hurrying the time.

175. **A gradual slackening of the pace is denoted by** :—

Rallentando (*rall.*) = gradually getting slower.

Ritardando (*ritard.*)
Ritenuto (*rit.*)
Slentando (*slent.*)
Slargando (*slar.*)
} = retarding or keeping back the time.

See also the words *Calando* and *Perdendosi* in § 172.

176. **Comparative pace-indications are** :—

A tempo = In time, *i.e.*, after a Rall. or Accel., or their equivalents.

Tempo Giusto = In strict, or *exact* time.

Doppio Tempo, or *Doppio Movimento* = In double time, *i.e.*, as fast again as the preceding movement.

L'istesso tempo = In the same time as the preceding movement. This term is used when the time-signature is changed, but the *beats* are still to be of the same length as before.

Tempo Primo = In the same time *as at first.*

Ad libitum, or *A piacere* = At the performer's pleasure, as regards time.

Più mosso = *more* motion, *i.e.*, *quicker*—not gradually, but at once.

Meno mosso
Più lento
} = *less* motion, *i.e.*, *slower*—not gradually, but at once.

177. **The Metronome** is an instrument invented for the purpose of accurately measuring the time or *speed* of a piece of music. Clockwork mechanism inside sets in motion an outside pendulum, the speed of which is regulated by a sliding weight, according to the various grades of time measured on the index. The Metronome should beat once a second, or 60 times a minute, if set at 60.

For example, ♩ = 126 means that the sliding weight should be set to 126 on the index, when, on the instrument being set in motion, the beats of the pendulum show the speed of the *crotchets.*

𝅗𝅥 = 80 means that the weight should be set at 80, when the pendulum beats show the speed of the *minims.*

178. Another and a far simpler kind of metronome consists of a **tape** marked off into certain fractions of a minute. This tape is coiled into a metal case by means of a spring, and can be used in the manner of a pendulum.

The tape being drawn out of its case until the required number appears, is then secured in that place by means of a stud. Upon causing the metal case (which acts as the *weight* of the pendulum) to swing steadily, the required tempo will be accurately indicated.

CHAPTER X.

FINAL HINTS FOR EXAMINATIONS.

At the Examination **the Examiners will pay special attention to** :—

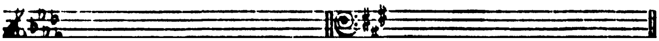
Correct spelling.
Accuracy of notation, including—
The correct position of stems with respect to the notes.
The proper order and position of sharps and flats in key-signatures.
Due insertion of necessary accidentals, ties, slurs, etc.
Proper grouping of quavers and shorter notes.
All transposed phrases must be given complete, with correct key and time-signatures.

Following is a **specimen paper** set for the Junior Division of the Trinity College of Music Local Examinations in Theory of Music :—

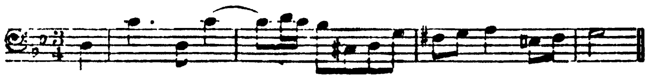
Time allowed—Two hours.

Marks required for Pass Certificate, 65.
,, ,, *Honours* ,, 80.

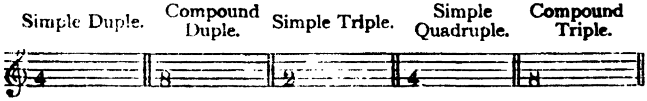
1. (10 marks.) Write, in **semibreves**, a **descending** octave of each of these Scales :—



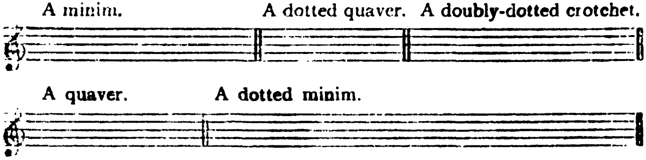
2. (15 marks.) Transpose this Melody into the **Treble** clef, making it an octave higher :—



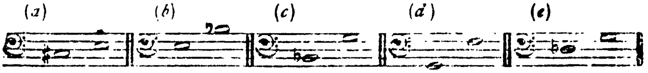
3. (10 marks.) Complete these Time-signatures according to the description over each bar :—



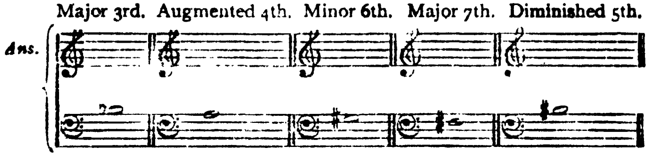
4. (15 marks.) Express, in **semiquaver** notes, the time-value of—



5. (10 marks.) Name these Intervals :—



6. (15 marks.) On the upper staff write the notes necessary to form the Intervals **named** :—



7. (10 marks.) Give the **English** meanings of—*Mezza voce ; Allegretto ; Decrescendo ; Affrettando ; Larghetto.*

8. (15 marks.) Give the **Italian** words which mean—Getting Slower and Softer ; Quicker and Louder ; Quicker than *Presto* ; Going at a moderate pace ; Quick, merry.

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ADVANCED JUNIOR DIVISION.

Prepared for the Use of Students,

MORE ESPECIALLY FOR THE

LOCAL CENTRE EXAMINATIONS IN
THEORY OF MUSIC
OF
Trinity College of Music,

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PREFACE.

THIS little Manual is intended as a Text-Book for the preparation of Candidates for the **Advanced Junior** Divisions of the Trinity College of Music Local Examinations in Theory of Music. It contains a complete course of instruction in all the subjects prescribed in the Syllabus for the Junior Divisions, together with useful hints for the successful working of Examination papers. Junior Division candidates are expected to know thoroughly the contents of the Preparatory Text-Book before they begin the study of the present manual; but for the convenience of those students who may have passed the Examination in the Preparatory Division some time ago, or who may have acquired the same knowledge from other sources, a brief *resumé* of the chief contents of the Preparatory Text-Book has been given in these pages. The attention of teachers cannot be too forcibly drawn to the great importance of **ear-training**. Every fresh point of instruction should be amply illustrated upon the pianoforte keyboard; especially such matters as the position of the semitones in the various scales, the relative duration of sounds, and their grouping according to the laws of accent, syncopation, etc., as well as the various methods of melodic *embellishment* by means of "grace-notes," turns, shakes, etc. The aural effect and scale-relationship of every interval should be clearly demonstrated to students, who should also have every facility afforded them for practising Exercises in **Musical Dictation**, and for preparing to pass the **ear-tests** demanded by the Practical Divisions of the College Local Examination System.

It is by no means intended that teachers should present the contents of this book to their pupils in the order here given, chapter by chapter. On the contrary, it may very often be necessary to vary that order considerably, so as to adapt the instruction to the different mental capabilities of the pupils. For instance, under certain circumstances a first term's work might very well be planned somewhat in this order:—

Lesson I., §§ 8–19; Lesson II., §§ 77–80; Lesson III., §§ 95–112; Lesson IV., §§ 81–94; Lesson V., §§ 24–36; Lesson VI., §§ 128–133; Lesson VII., §§ 113–124; Lesson VIII., §§ 37–48; Lesson IX., §§ 49–59; Lesson X., §§ 60–66; Lesson XI., §§ 1–7; Lesson XII., §§ 137, 138. No fresh matter should be introduced before the preceding instruction has been thoroughly understood; nor should too long a period be allowed to elapse before the knowledge already acquired is further impressed upon the pupils' minds by some form of repetition.

Other re-arrangements can easily be made by teachers to suit their own individual requirements; but the order of contents in the present Text-Book has been planned on the lines of the College Syllabus for the Junior Divisions, with a view of making the work more generally useful as a reference as well as a teaching book.

A companion book of Questions and Exercises is published, in which the number of every *Question* corresponds exactly with the number of that paragraph in the present Text-Book, which contains the answer to the question set. The two books (if used together) will thus present the instruction in the form of a Catechism—with this advantage over ordinary books of that kind, viz., that questions and answers are not given together on the same page of the same book.

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A TEXT-BOOK
OF
MUSICAL KNOWLEDGE.

ADVANCED JUNIOR DIVISION.

CHAPTER I.

MUSICAL SOUNDS AND HOW THEY DIFFER—AN OUTLINE OF MUSICAL NOTATION, SHOWING ITS VARIOUS USES TO MUSICIANS.

1. **Sound** is a sensation of the *brain* which depends entirely upon our *sense of hearing*; it has no separate existence apart from ourselves.

2. The *immediate* cause of sound is the **vibration** of a sounding body or musical instrument.

3. **Vibration** is a very rapid to-and-fro movement (or *tremulous motion*, as it is sometimes called). We can *see* this vibration taking place in the case of a sounding string on either a piano or a violin; we can *feel*—by touching the outside of a sounding organ-pipe—that the air within the pipe is in a state of vibration.

4. Some **medium** is necessary for carrying the vibrations of the sounding body to our ears. This medium is generally the **air.**

The vibrations of the sounding body set up in the air a corresponding number of **sound-waves.**

The sound-waves pass through the air until they reach the **drums of our ears.**

Our ear-drums, being disturbed by the sound-waves, convey the effect of the vibrations to the **brain.** It is the brain alone which by this means receives the **sensation** we call **sound.**

5. Musical sounds differ in these six ways:—

(i.) **Pitch**—by which we mean that a sound is high up, low down, or somewhere between these two extremes. Pitch depends upon the *number* of vibrations made per second by the sounding body. This vibration-number *increases* as the sounds get higher in the scale, and *decreases* as they get lower.

(ii.) **Intensity** or **quantity**—by which we mean that a sound is loud or soft, or moderately loud or soft. Intensity depends upon the *degree of force* with which the sound-waves reach our ears. The louder the sound, the more violent will be the action of the sound-waves upon our ears, and *vice versa.*

(iii.) **Quality** or **Timbre**—by which we describe the *character* of a sound as being rich, full, hard, thin, etc. By their **quality** we can distinguish the sounds of a flute from those of a violin, or the tones of the human voice from those of an instrument. Quality depends upon the *manner* in which the sounding body vibrates. The playing of a flute will act differently upon the air to the playing of a violin, etc.; the sound-waves will be different, and these again will act differently upon our ears and brains.

(iv.) **Duration**—by which we mean the *length of time* a sound lasts. In listening to music we hear that some sounds are *held on* or *sustained* for a considerable time; others are "cut off" quite short; others are neither very long nor very short, etc.

(v.) **Accent**—by which we mean the *stress* or *emphasis* which is given to some sounds more than to others; exactly as in ordinary speaking or reading, we lay greater stress upon certain words or syllables than upon others.

(vi.) **Tonal relationship**—by which we mean the order or arrangement of sounds into what are called **scales** and **keys**; without which it would be impossible to make or to recognise **tunes.**

All these differences in musical sounds have to be **expressed upon paper,** so that a composer may be able to write down the music he desires to be played or sung, and that the players and singers may be able to understand what has been written down for them.

6. A knowledge of **musical notation,** therefore, teaches us that :—

(i.) **Differences in pitch** are expressed upon paper by the various positions of notes upon a staff.

(ii.) **Differences in intensity** (quantity) are indicated by the use of words, letters, or signs ; such as *forte*, *piano*, *crescendo*, *diminuendo*, *ff*, *pp*, <, >, etc.

(iii.) **Differences in quality** are shown by a composer writing the name of the voice or instrument he intends to be used—such as *Soprano*, *Contralto*, *Tenor*, *Bass*, *piano*, *organ*, *violin*, *flute*, *trumpet*, etc.

(iv.) **Differences in duration** are expressed by the various *shapes of the notes* used—such as 𝅝, 𝅗𝅥, 𝅘𝅥, 𝅘𝅥𝅮, 𝅘𝅥𝅯, etc.

(v.) **Differences in Accent** are indicated by the *time-signature*, which assigns various degrees of accent to the notes within a bar, thus :—

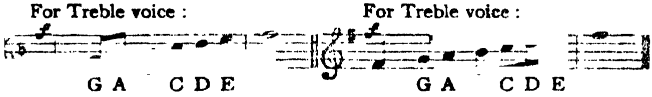
Fig. 1.

The mark (>) is here used to show which notes are accented more than others.

(vi.) **Differences in tonal relationship** are shown by the various *key-signatures*, each of which indicates that particular arrangement of notes or *scale* which has been selected by the composer for his music.

Thus, in the two scale-passages here given in Fig. 2, the five notes indicated by their letter-names—G, A, C, D, E—are exactly the same in pitch, intensity, quality, duration, and accent ; yet they produce quite a different effect upon the ear, because of the altered relationship which is effected by the change of key-signature :—

Fig. 2.



In the same way the same person may appeal to us differently as we regard him in his various social relationships—as father, son, husband, brother, uncle, cousin, friend, enemy, etc.

7. We have to study Musical Notation in order to read, write, and understand music thoroughly. We desire to be able not only to play or sing "at sight," but also to acquire the power of knowing what a piece of music will sound like by merely *looking at it.* And we wish to be able to write down correctly any "musical thoughts" which may occur to us.

CHAPTER II.

POSITION OF NOTES ON THE STAFF—LEGER LINES—TREBLE AND BASS CLEFS—ACCIDENTALS.

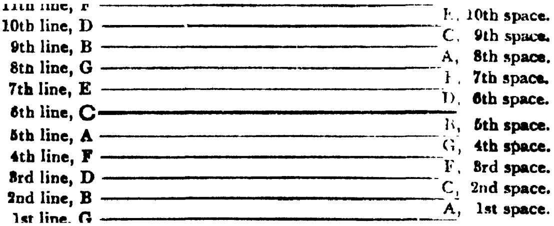
8. The first thing which any system of musical notation has to do, is to show the correct pitch of every sound required by the composer, in such a way as to leave no doubt as to the exact distances or *intervals* between the various sounds. The eye and mind must be assisted to perceive the rising and falling of the sounds as they constantly change from low to high, or from high to low. This is done by means of the Great Staff.

9. The Great Staff is a series of eleven lines, arranged one above the other, like the steps of a ladder.

Fig. 3.

The Great Staff.

Notice the thick "Middle C" line which corresponds with the C in the middle of the keyboard:—



On these eleven lines, and in the ten spaces between the lines, are placed the notes which represent the sounds required to be sung or played. Every line and every space of the Great Staff has its own particular letter-name, as shown in Fig. 3.

10. Students must carefully distinguish between the words **tone** and **note**. A **tone** is a musical sound of definite pitch; a **note** is a character or sign written on the staff to show by its position thereon—high, medium, or low—the exact pitch of the tone or sound it pictorially represents. The "notes" take their names from the lines or spaces which they occupy on the staff.

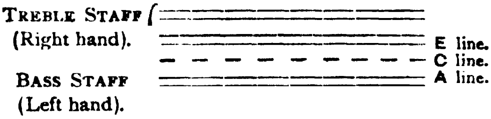
11. A **pianoforte*** **score** has ten lines. It is the Great Staff with the Middle C (thick) line omitted. The space between the A and E lines—when the Middle C line has been taken out—is *widened*, and the two five-lined staves (upper and lower) are joined together by a brace or bracket at the left-hand side.

12. The upper staff is for the Right-Hand or **Treble** notes; the lower one for the Left-Hand or **Bass** notes.

13. Whenever the note Middle C is wanted, it is written on a short line called a **leger line**, which for the moment takes the place of the omitted Middle C line—either at the top of the Left-Hand or lower staff, or at the bottom of the Right-Hand or upper staff, as in Fig. 4:—

Fig. 4.

Pianoforte Score.

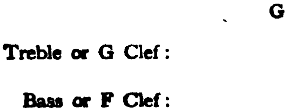


14. The upper and lower staves are distinguished one from the other by **Clefs**.

15. A **clef** is a sign which points out the name of the particular *line* it is placed upon. Originally, the clef was merely the capital **letter** indicating the name of its line:—

Fig. 5.

Pianoforte Score, with Clefs.



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* This word is often abbreviated "piano."

16. The **Treble clef** is placed on the second line of its staff, counting *up* from the bottom. The **Bass Clef** is placed on the second line of its staff, counting *down* from the top.

17. Only the first seven letters of the Alphabet are used for naming musical sounds; any notes beyond the seven—

A, B, C, D, E, F, G—

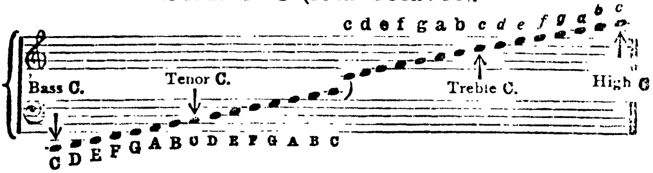
are simply repetitions of these at a higher or lower pitch.

18. The **eighth sound** is called the **Octave** (*abbreviated* "*8ve*") of the first. Any note struck with its octave blends so perfectly with it as to have the effect of a single but *brighter* sound.

19. Fig. 6 shows a continuous series of sounds, ranging from a note two octaves *below* Middle C, to a note two octaves *above* Middle C:—

Fig. 6.

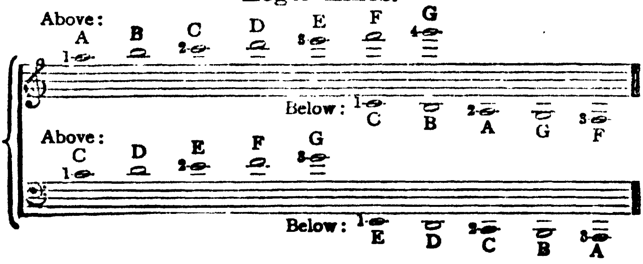
Scale of C (four octaves).



As seen in Figs. 6 and 7, when a sound is too high, or too low to be written on the staff, short additional lines are used above and below the staff, called *Leger* or *Leager* lines (*Leger*, light). Notes may be written on these leger lines, or in the spaces between them, as:—

Fig. 7.

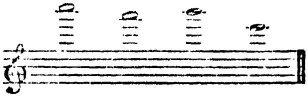
Leger Lines.



Leger lines are merely "light lines" cut short, added outside the staff.

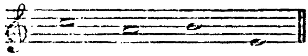
20. When *many* leger lines are used above the Treble staff, if the first two be disregarded or deducted from the rest, those above will read exactly as the Treble staff itself, ***two octaves higher in pitch.*** Thus :—

Fig. 8.



will be the same as :—

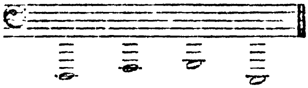
Fig. 9.



if played two octaves higher.

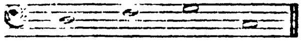
Similarly, if the first two leger lines below the Bass staff be deducted, those below will read as the Bass staff itself, ***two octaves lower.*** Thus :—

Fig. 10.



will be the same as :—

Fig. 11.



if played two octaves lower.

21. Sometimes, in order to avoid the use of a great many leger lines, the sign 8va is written over a passage of notes, to show that they must be read, sung, or played, as if they had been written *an octave above.* The word loco, used after 8va, signifies that the notes are to be read, etc., in their original pitch as written.

22. 8va bassa, placed below a passage, signifies that it is to be played *an octave lower* than written.

23. The figure 8 placed under notes indicates that the octaves below are to be played with them.

24. **The interval or distance between any piano key and the *next* above or below it, whether black or white, is called a semitone** or **half-tone.**

25. The interval or distance between any piano key and the *next but one* above or below it is called a **whole tone.**

26. A **sharp** (♯) placed *before* any note **raises** its pitch a *semitone.*

27. A **flat** (♭) placed *before* any note **lowers** its pitch a *semitone.*

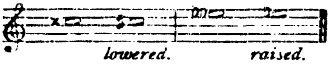
28. A **natural** (♮) restores a note to its original pitch, *lowering* it a semitone if previously sharpened, *raising* it a semitone if previously *flattened.*

29. A **double-sharp** (x) placed *before* any note **raises** it two semitones.

30. A **double-flat** (♭♭) placed *before* any note **lowers** it two semitones.

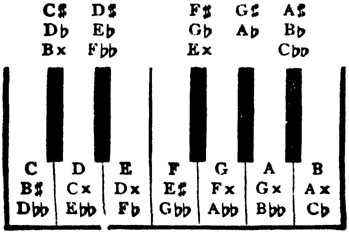
31. A doubly-sharpened note, or a doubly-flattened note, can be respectively lowered or raised a semitone by writing a *single* sharp or flat before a note, so:—

Fig. 12.



32. Eleven of the twelve pianoforte keys in every octave are capable of bearing three different letter-names. The remaining one (the middle key in every group of three black ones) can only be called by two names—G♯ and A♭.

Fig. 13.



33. A note is enharmonically changed when its name is changed upon paper (as C♯ to D♭), whilst its pitch upon the pianoforte keyboard remains exactly the same.

34. As a great deal of foreign music is used in this country, as well as editions of classical works which are published abroad, it is very convenient to know the **foreign names of the notes**, as shown in Fig. 14:—

Fig. 14.

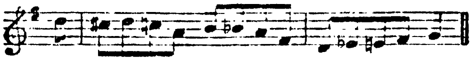
English.	Italian.	French.	German.
C.	Do.	Ut.	C.
C flat.	Do bemolle.	Ut bémol.	Ces.
C sharp.	Do diesis.	Ut dièse.	Cis.
D.	Re.	Re.	D.
D flat.	Re bemolle.	Re bémol.	Des.
D sharp.	Re diesis.	Re dièse.	Dis.
E.	Mi.	Mi.	E.
E flat.	Mi bemolle.	Mi bémol.	Es.
E sharp.	Mi diesis.	Mi dièse.	Eis.
F.	Fa.	Fa.	F.
F flat.	Fa bemolle.	Fa bémol.	Fes.
F sharp.	Fa diesis.	Fa dièse.	Fis.
G.	Sol.	Sol.	G.
G flat.	Sol bemolle.	Sol bémol.	Ges.
G sharp.	Sol diesis.	Sol dièse.	Gis.
A.	La.	La.	A.
A flat.	La bemolle.	La bémol.	As.
A sharp.	La diesis.	La dièse.	Ais.
B.	Si.	Si.	H.
B flat.	Si bemolle.	Si bémol.	B.
B sharp.	Si diesis.	Si dièse.	His.

It will be seen from Fig. 14 that the Italians and French call notes by "Sol-fa" names, and use respectively *bemolle* and *bémol* for a flat, and *diesis* and *dièse* for a sharp. The Germans use letters for note-names, with the addition of *es* for a flat and *is* for a sharp; B♭ they call B, B♮ they call H.

35. A ♯, ♭, ×, ♭♭, or ♮, which does not belong to the

scale or key indicated by the key-signature, is called **an accidental.**

Fig. 15.



36. The effect of an **accidental** continues upon the staff throughout the bar in which it occurs, unless it is contradicted by another accidental.

CHAPTER III.

DIATONIC SCALES: MAJOR AND MINOR.

37. A **Diatonic Scale** is a series of eight sounds, ascending, in alphabetical order, from any note to its octave. Every step or degree bears a different letter-name from any of the others.

38. There are two kinds of diatonic scale—**major** and **minor**.

39. In the **minor** scale, the third degree or step is one semitone nearer the first degree than is the third degree of the major scale.

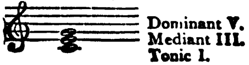
In olden days a **major** scale was often spoken of as "a scale with the *greater* third"; a **minor** scale was similarly said to be "a scale with the *lesser* third."

40. The following **technical names** are given to the degrees of *all* diatonic scales:—The 1st, *Key-note* or *Tonic*; the 2nd the *Super-tonic*; the 3rd the *Mediant*; the 4th the *Sub-dominant*; the 5th the *Dominant*; the 6th the *Sub-mediant*; the 7th the *Leading-note*; the 8th degree is the *upper* Key-note or Tonic.

41. These names will be best remembered in the following order:—

The Tonic is the 1st note (I.), and the Dominant is the 5th *above* it (V.). The Mediant (or middle note between these two) is the 3rd (III.).

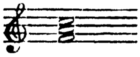
Fig. 16.



Note.—The Scale of C Major is here referred to; but the same technical names are given to the same numerical degrees of any other scale, major or minor.

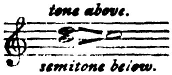
42. The Tonic is also the 8th note (VIII.), and the *Sub*-dominant is the 5th *below* it (V.). The *Sub*-mediant (or middle note between these two) is the 6th (VI.). "Sub" means *below* or *under*.

Fig. 17.


Tonic VIII.
Sub-mediant VI. (mediant *below* the Tonic).
Sub-dominant IV. (dominant or 5th *below* the Tonic).

43. The *Super*-tonic is a whole tone above the Tonic (II.)—"Super" means *above*. The "Leading-note," or 7th of the scale (VII.), is a semitone below the upper Tonic and *leads* up to it.

Fig. 18.



44. The major scales have already been explained fully in the "Preparatory Text-Book," Chapter VIII., pp. 32–38; the chief points to be remembered about them are these:—

(i.) The semitones come between the 3rd and 4th, and the 7th and 8th degrees, both ascending and descending.

(ii.) Every major scale consists of two similarly constructed halves, called *Tetrachords*.

(iii.) Every tetrachord can belong to two different major scales, by being the upper half of one, and the lower half of another.

(iv.) A whole tone comes between the 4th note of the lower tetrachord and the 1st note of the upper tetrachord in every major scale.

(v.) The sharps or flats *essential* to the scale are grouped together and placed after the clef, in the form of a *key-signature*.

45. The **key-signatures of major scales** can be easily remembered in this way:—

C has no sharps or flats; C♯ has 7 *sharps*; C♭ has 7 *flats*.

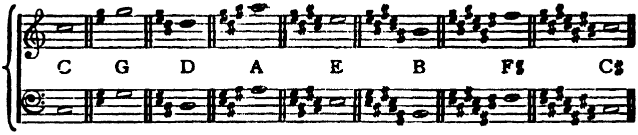
{ D has 2 *sharps*; E has 4 *sharps*; F♯ has 6 *sharps*. }
{ B♭ has 2 *flats*; A♭ has 4 *flats*; G♭ has 6 *flats*. }

{ D♭ has 5 *flats*; E♭ has 3 *flats*; F has 1 *flat*. }
{ B has 5 *sharps*; A has 3 *sharps*; G has 1 *sharp*. }

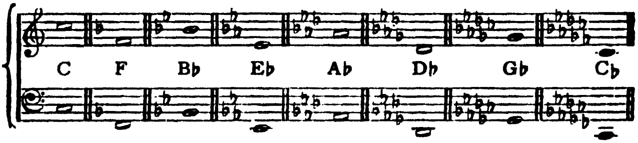
46. In **key-signatures** the *order of sharps is*—F, C, G, D, A, E, B; the *order of flats is*—B, E, A, D, G, C, F.

47. Here is a table of key-signatures, showing in each case the key-note or tonic of the scale:—

(i.) Major key-signatures with sharps:—



(ii.) Major key-signatures with flats:—



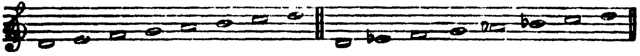
In a major key-signature with sharps, the key-note is a semitone above the last sharp. In a major key-signature with flats, the key-note is a fourth below the last flat.

48. Sometimes (at Examinations) candidates are asked to write **major scales beginning and ending upon other degrees than the tonic**; such as Mediant, Subdominant, etc.

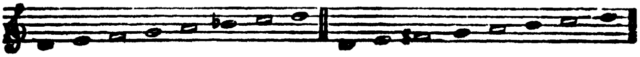
Students will therefore find it very useful practice to write out a series of eight notes, beginning upon any degree of the Scale of C major they may choose—see Fig. 19 (*a*)—and then, by adding the necessary accidentals, they can alter this series of eight notes into a major scale, beginning and ending upon some degree other than its own tonic—see Fig. 19 (*b*), (*c*), (*d*), (*e*), (*f*):—

Fig. 19.

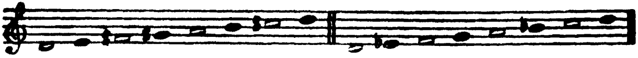
(*a*) Scale of C, beginning on its *Super-tonic.* (*b*) Scale of E♭, beginning on its *Leading-note.*



(*c*) Scale of F, beginning on its *Sub-mediant.* (*d*) Scale of G, beginning on its *Dominant.*



(e) Scale of A, beginning on its *Sub-dominant.* **(f) Scale of B♭, beginning on its** *Mediant.*



49. **Minor scales** are connected with major scales in two ways :—

(i.) They can begin on the *same tonic*, but have different key-signatures.

(ii.) They can have the *same key-signature*, but begin on different tonics.

50. A minor scale which begins on the same tonic as any given major scale, is called the **tonic minor** of the latter.

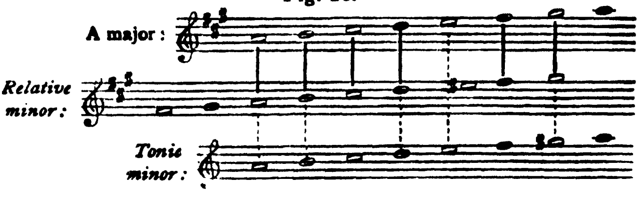
51. The signature of the tonic minor has always three sharps less or three flats more than the signature of its tonic major scale.

52. A minor scale which has the same key-signature as any given major scale, is called the **relative minor** of the latter.

53. A relative minor scale begins three semitones below the tonic of its relative major scale, *i.e.*, upon the 6th degree or sub-mediant of the latter.

54. Every major scale has **six notes in common** with its *relative* minor scale, and **five notes in common** with its *tonic* minor scale :—

Fig. 20.



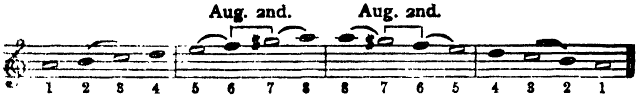
55. Every minor scale can be used in **two different forms** :—

(i.) The Harmonic (or "Normal").
(ii.) The Melodic (or "Arbitrary").

56. In the **Harmonic form**, the semitones occur between the 2nd and 3rd, the 5th and 6th, and the 7th and 8th degrees, both ascending and descending. An **augmented 2nd** occurs between the 6th and 7th degrees; this is an interval or distance of three semitones, and is accordingly one semitone wider than a whole tone:—

Fig. 21.

A minor relative to C major.



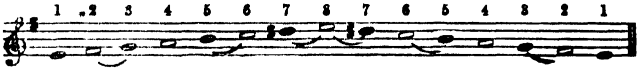
57. In writing the Harmonic form of any minor scale, we should take care that the 7th degree (or leading-note) is always indicated by an *accidental.* This does not make the scale chromatic, because no two of its degrees bear the same letter-name. The 3rd and 6th degrees of the Harmonic Minor Scale are both a semitone lower than the 3rd and 6th degrees of the major scale which begins on the same tonic.

58. Fig. 22 gives the Harmonic form of every minor scale with sharps:—

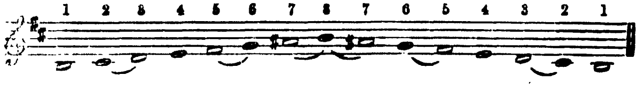
Fig. 22.

Minor Scales with Sharps—"Harmonic form."

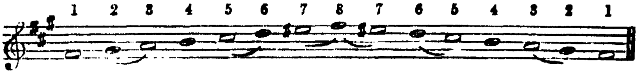
E minor, relative to G major.



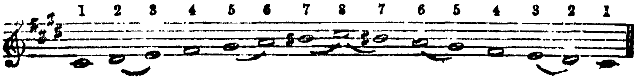
B minor, relative to D major.



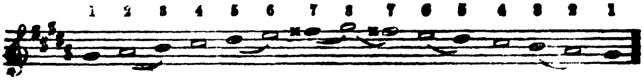
F♯ minor, relative to A major.



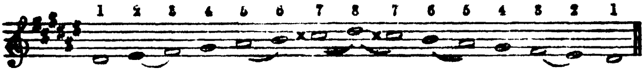
C♯ minor, relative to E major.



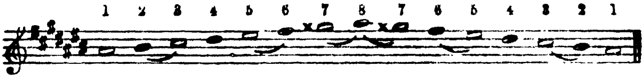
G♯ minor, relative to B major.



D♯ minor, relative to F♯ major.



A♯ minor, relative to C♯ major.



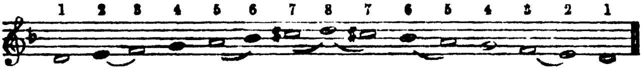
On looking at the signatures of minor keys with sharps, it should be noticed that the key-note is always *a whole tone below the last sharp* (which is the super-tonic of the scale).

59. Fig. 23 gives the Harmonic form of every minor scale with flats.

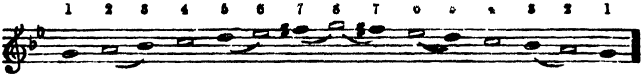
Fig. 23.

Minor Scales with Flats—"Harmonic form."

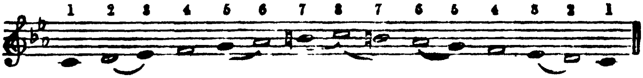
D minor, relative to F major.



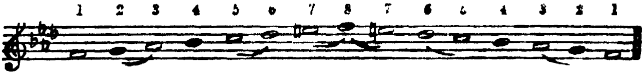
G minor, relative to B♭ major.



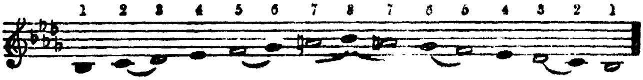
C minor, relative to E♭ major.



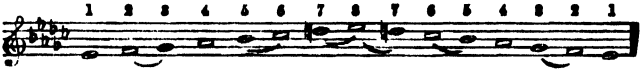
F minor, relative to A♭ major.



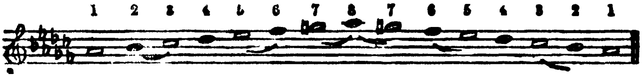
B♭ minor, relative to D♭ major.



E♭ minor, relative to G♭ major.



A♭ minor, relative to C♭ major.

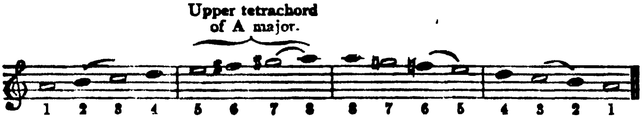


On looking at the signatures of minor keys with flats, it should be noticed that the key-note is always *the third note above the last flat* (which is the sub-mediant of the scale).

60. To avoid the augmented interval between the 6th and 7th degrees of the Harmonic minor scale, the **Melodic or Arbitrary minor scale** has the 6th degree *raised* in ascending, and the 7th and 6th both *lowered* in descending.

Fig. 24.

A minor, relative to C major.



61. In the **Melodic form** the semitones occur between the 2nd and 3rd, and the 7th and 8th **ascending**; and between the 6th and 5th, and the 3rd and 2nd **descending**.

62. In writing the Melodic form of any minor scale, take care that the 6th and 7th degrees ascending are always indicated by accidentals.

63. Accidentals are not required for the descending form, unless to contradict the previous sharpening of these degrees in the ascending form.

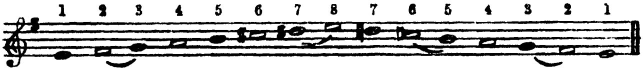
64. Observe that the *upper* tetrachord of the melodic form of a minor scale is exactly the same as the upper tetrachord of the major scale which begins on the same tonic. But in the *lower* tetrachord the 3rd degree of a minor scale (the mediant) is *always* one semitone lower than the mediant of the major scale beginning on the same tonic.

65. Fig. 25 gives the Melodic form of every minor scale with sharps :—

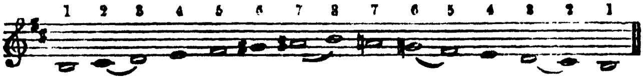
Fig. 25.

Minor Scales with Sharps—"Melodic form."

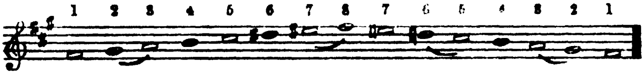
E minor, relative to G major.



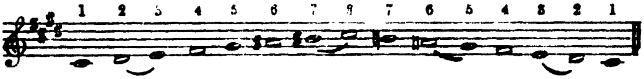
B minor, relative to D major.



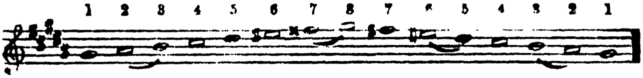
F♯ minor, relative to A major.



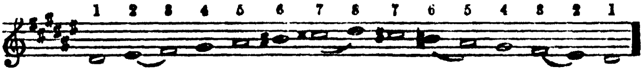
C♯ minor, relative to E major.



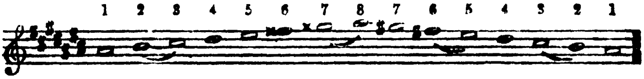
G♯ minor, relative to B major.



D♯ minor, relative to F♯ major.



A♯ minor, relative to C♯ major.

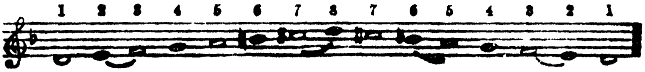


66. Fig. 26 gives the Melodic form of every minor scale with flats :—

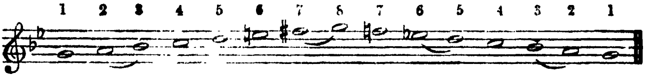
Fig. 26.

Minor Scales with Flats—"Melodic form."

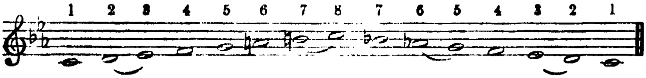
D minor, relative to F major.



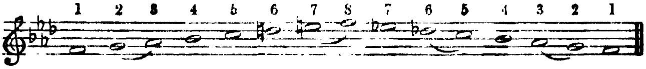
G minor, relative to B♭ major.



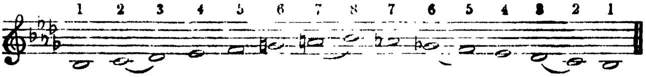
C minor, relative to E♭ major.



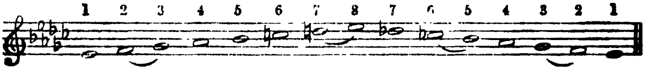
F minor, relative to A♭ major.



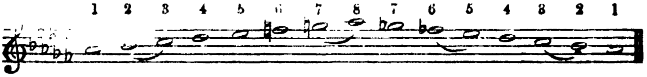
B♭ minor, relative to D♭ major.



E♭ minor, relative to G♭ major.



A♭ minor, relative to C♭ major.



In 18th-century music (by Corelli, Geminiani, Handel, and others) we often see the last sharp or flat omitted from a key-signature. In this case, an accidental was inserted when either the leading-note of a major key with sharps, or the submediant of a minor key with flats, was required. Minor keys with sharps, and major keys with flats, were written with *complete* key-signatures.

Students should now practise writing Minor Scales, beginning and ending upon other notes than the Tonic, as shown in § 48.

CHAPTER IV.

THE NOTATION OF THE CHROMATIC SCALE.

67. The **Chromatic Scale** proceeds by semitones only.

68. Within the octave of any note on the piano keyboard there are twelve sounds, seven of which occur in the Major

Scale which has that note for its tonic. We have now to learn how to write the other five.

69. There are two ways of writing the Chromatic Scale: the **Harmonic** way, and the **Melodic** way.

70. At an Examination, always write the *Harmonic* way, unless the other is asked for.

71. When giving the **Harmonic Chromatic Scale** of any note, first write the **Major Scale** which begins on that note, leaving room for the extra five degrees to be written. Let Roman numerals stand for the degrees of the Major Scale:—

I. II. III. IV. V. VI. VII. VIII.
semitone *semitone*

We should be careful to write III.IV. and VII.VIII. **close together** so that no other note can come between them.

There are two methods by which we can next proceed.

First Method: *Flatten* (by means of a ♭ or ♮) II., III., VI., and VII. *Sharpen* IV. (by means of a ♯ or ♮).

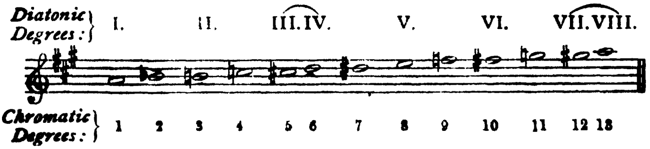
The Harmonic Chromatic Scale will then appear thus:—

I., ♭2, ♮II., ♭3, ♮III. IV., ♯4, V., ♭6, ♮VI., ♭7, ♮VII. VIII.

The five Arabic numerals indicate the extra notes added to make the semitone steps of the Chromatic Scale, in those places where the Major Scale proceeded by tones.

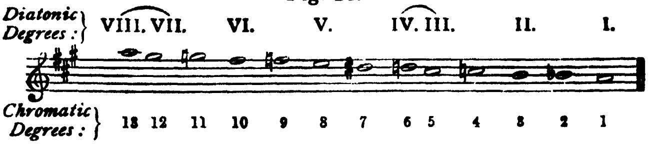
Put into musical notation, this Harmonic Chromatic Scale with a **sharp** signature will appear thus in a Major key :—

Fig. 27.



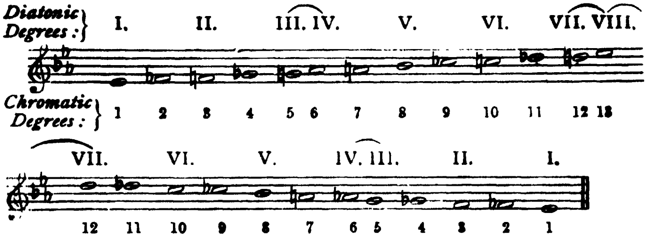
The **descending form** of the Harmonic Chromatic Scale, although the same in notation, will not require as many accidentals as the ascending form:—

Fig. 28.



With a **flat signature**, the Harmonic Chromatic Scale will appear thus in a Major key :—

Fig. 29 A.



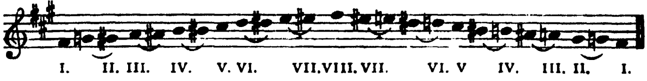
Second Method: Write the letter-names of the Tonic and Dominant (I. and V.) of the Diatonic Scale *once only*, and *do not write any other letter-name more than twice*.

Observe that in Fig. 27 there is only *one* A (tonic), and only *one* E (dominant); but each of the other letter-names appear *twice*. Thus there are two B's, two C's, two D's, two F's, and two G's. The Harmonic Chromatic Scale has the same notation ascending and descending. Sometimes at an Examination the key-signature is given, sometimes it is not. In any case, the II., III. IV., and VII. degrees of the Diatonic Scale will require accidentals to contradict the preceding chromatic notes.

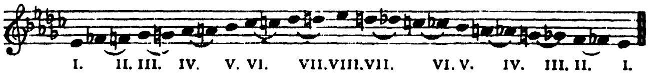
With **minor** key-signatures, the order of accidentals will be as here shown :—

Fig. 29 B.

For Sharp signatures.


I. II. III. IV. V. VI. VII. VIII. VII. VI. V IV. III. II. I.

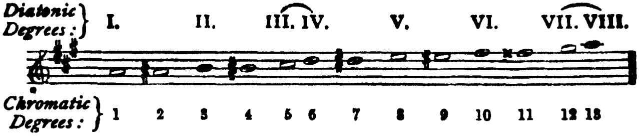
For Flat signatures.


I. II. III. IV. V. VI. VII. VIII. VII. VI. V. IV. III. II. I.

72. The **ascending form** of the **Melodic Chromatic Scale** is obtained by the insertion of only five accidentals.

With a **major** key-signature, the *mediant* and leading-note are unaltered; with a **minor** key-signature the *supertonic* and dominant are unaltered. In each case the five remaining diatonic scale-degrees are used—first without accidentals, but are afterwards raised a chromatic semitone by means of a ♯ or × (or a ♮ in keys with flats.)

Fig. 30 A.

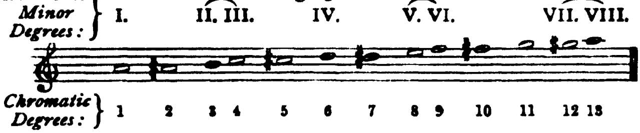


Be most careful when you write the degrees of the Major Scale to place the III. IV. and VII. VIII. degrees so close together that it is impossible to write another note between them.

In writing the **Ascending form of the Melodic Chromatic Scale with a major signature,** *raise* the following degrees I., II., IV., V., VI., as in Fig. 30 A.

In writing the **Ascending form of the Melodic Chromatic Scale with a minor signature,** write first the degrees of the Harmonic Minor Scale, and then *raise* I., III., IV., VI., and *lower* VII., as in Fig. 30 B.

Fig. 30 B.

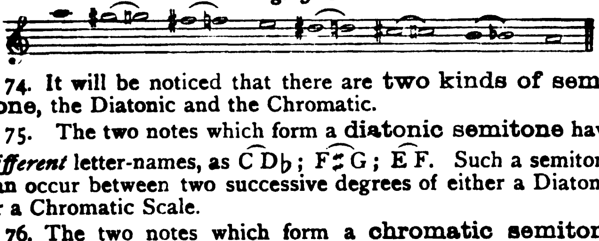


73. The **Descending form of the Melodic Chromatic Scale** is exactly the same as the descending form of the Harmonic Chromatic Scale. Thus:—

With a Major signature, write exactly as Fig. 28.

With a Minor signature, so:—

Fig. 30 C.



74. It will be noticed that there are **two kinds of semitone,** the Diatonic and the Chromatic.

75. The two notes which form a **diatonic semitone** have *different* letter-names, as C D♭; F♯ G; E F. Such a semitone can occur between two successive degrees of either a Diatonic or a Chromatic Scale.

76. The two notes which form a **chromatic semitone** have the *same* letter-name; but one or both of the notes will have an accidental, as C♯ C♮; B B♭. *Such a semitone can only occur in a Chromatic Scale.*

CHAPTER V.

TIME—RELATIVE DURATION OF SOUNDS—NOTES—RESTS—DOTS—TIES—STACCATO MARKS—THE PAUSE—GROUPING OF NOTES.

As most of the subjects mentioned above have already been fully explained in the *Preparatory Text-Book* (Chapters V. and VI.), we need only a brief summary of them in this place.

77. **Notes** indicate *sound*; **rests** indicate *silence*.

78. The **time** (or duration) of **notes** is expressed by their various *shapes*.

79. The **time** (or duration) of **rests** is indicated by their various shapes; and also, in two cases (Semibreve and Minim), by their position on the staff.

80. Fig. 31 shows the shapes, etc., of the various notes and rests, beginning with the longest note or Breve, and ending with the shortest note or Semidemisemiquaver:—

Fig. 31.

𝅜	is a	*Breve*	or Longest note;	𝄺	is a	*Breve*	rest.
𝅝	is a	*Semibreve*	or Whole note;	𝄻	is a	*Semibreve*	rest.
𝅗𝅥	is a	*Minim*	or Half note;	𝄼	is a	*Minim*	rest.
♩	is a	*Crotchet*	or Quarter note;	𝄽	is a	*Crotchet*	rest.
♪	is a	*Quaver*	or Eighth note;	𝄾	is a	*Quaver*	rest.
𝅘𝅥𝅯	is a	*Semiquaver*	or Sixteenth note;	𝄿	is a	*Semiquaver*	rest.
𝅘𝅥𝅰	is a	*Demisemi-quaver*	or Thirty-second note;	𝅀	is a	*Demisemi-quaver*	rest.
𝅘𝅥𝅱	is a	*Semidemi-semiquaver*	or Sixty-fourth note;	𝅁	is a	*Semidemi-semiquaver*	rest.

Every kind of note and rest is exactly half the length of the next longer note and rest, and twice the length of the next shorter note and rest.

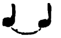
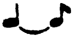
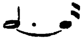
81. A **Dot** after a note makes that note half as long again; the note is then equal in value to *three* of the next shorter notes (instead of two), thus:—

𝅝 = 𝅗𝅥 𝅗𝅥   𝅝. = 𝅗𝅥 𝅗𝅥 𝅗𝅥
𝅗𝅥 = ♩ ♩   𝅗𝅥. = ♩ ♩ ♩
♩ = ♪ ♪   ♩. = ♪ ♪ ♪ and so on.

A second dot represents half the value of the first dot, thus:—

𝅝 = 𝅗𝅥 𝅗𝅥   𝅝. = 𝅗𝅥 𝅗𝅥 𝅗𝅥   𝅝.. = 𝅗𝅥 𝅗𝅥 𝅗𝅥 ♩
𝅗𝅥 = ♩ ♩   𝅗𝅥. = ♩ ♩ ♩   𝅗𝅥.. = ♩ ♩ ♩ ♪

82. A **Tie** or **Bind** is a curved mark, joining together two notes of the same pitch. It adds the value of the second

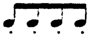
note to the first, thus :—  = four quavers ;  = five quavers ;  = thirteen semiquavers.

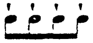
83. **Dots** affect the time-value of **rests** in the same way that they affect the time-value of *notes.* Rests are more often lengthened by the addition of other *shorter* rests.

84. **Ties** are never used to connect rests, they only connect *notes.*

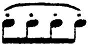
85. **Staccato** means *cut off*, or *detached.*

86. **Legato** means *bound together*, or played *smoothly.*

87. **Staccato** is indicated by the word itself, or more usually by dots placed *above* or *under* the notes : 

88. **Staccatissimo** (*very* short or detached) is indicated by spikes or dashes *above* or *under* the notes : 

89. **Legato** is indicated by the word itself, or by a curved line, called a slur, which may be long or short

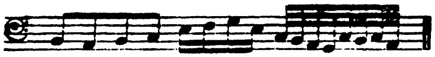
90. When Staccato and Legato marks are *combined*, the music must be played not quite smoothly, yet not too detached :  This combination of marks is sometimes called **slurred staccato.**

91. The **slur** is never combined with staccatissimo marks.

92. A **pause** (French, *Couronne* ; Italian, *Fermata*) 𝄐 𝄑 means that the note or rest over or under it must be *prolonged indefinitely*, at the pleasure or will of the performer or conductor.

93. Quavers, semiquavers, or demisemiquavers, are often written **in groups.** When this is so, it is usual to join their hooks :—

Fig. 32.



94. The **grouping of notes** is often a useful guide to the position of **accent** or stress, since the first note of a group is generally more marked, or more heavily accented, than any of the other notes in the same group.

CHAPTER VI.

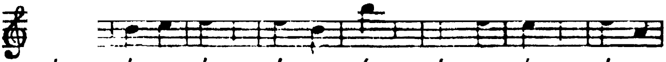
TIME-SIGNATURES AND ACCENT—BARS—RHYTHMICAL GROUPING OF NOTES (REGULAR AND IRREGULAR)—SYNCOPATION.

95. In listening to poetry, we hear a succession of regularly occurring accents :—

"Áll the áir was fúll of fréshness,
Áll the éarth was bríght and jóyous." (Longfellow's *Hiawatha*.)

In fitting words to music (or in writing instrumental music to which no words are sung), the accents are indicated by **upright lines drawn through the staff.** These lines, which are called **bars**, are placed immediately *before* a strongly accented note :—

Fig. 33.

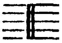

Áll the áir was fúll of frésh-ness, Áll the éarth was bríght and jóy-ous.

96. Accents may be **strong**, *weak*, or medium. Fig. 33 consists entirely of strong and weak accents used alternately.

97. A *weak* accent is sometimes called a **non-accent.**

98. The word **bar** also means the music contained between two bar-lines, although this space so *measured off* by the bar-lines is sometimes called a **measure.**

99. **The use of bar-lines** is to measure off the music into small equal portions, in order to show the strong accents, and to enable the performer to *count the time*, or a conductor to *beat the time.*

100. A **double bar**  marks the end of a piece, or of an important section of a piece. It has *nothing* to do with time or with rhythm.

101. The grouping of notes within bar-lines is called **Rhythm.**

102. The time-value or standard of bar-measurement is shown by figures which immediately follow the key-signature. These figures are called the **time-signature.**

103. A bar may contain two, three, or four **beats.** A beat

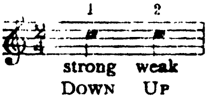
is shown by a movement of the conductor's stick—up, down, or sideways. A beat is sometimes called a **pulse.**

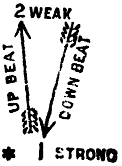
104. Rhythms (or groups) of two beats in the bar are called **Duple.** Rhythms (or groups) of three beats in the bar are called **Triple.** Rhythms (or groups) of four beats in the bar are called **Quadruple.**

105. If each beat can be divided into two halves, the time is said to be **Simple.**

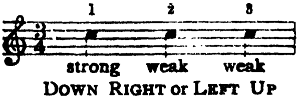
106. When each beat can be divided into three parts, the time is said to be **Compound.** In Compound time the *beat* consists of a **dotted note**; the *pulse* consists of a note, the time-value of which is one-third of the beat.

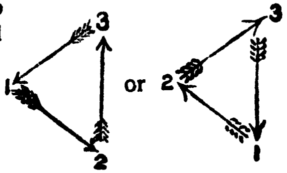
107. **Simple Duple Time** is accented, beaten, and counted thus :—



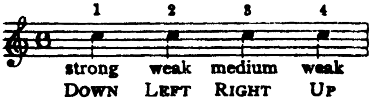


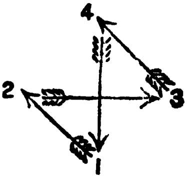
108. **Simple Triple Time** is accented, beaten, and counted thus :—



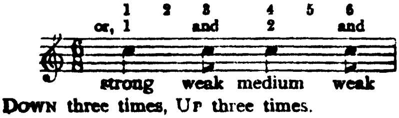


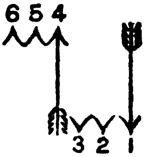
109. **Simple Quadruple Time** is accented, beaten, and counted thus :—





110. **Compound Duple Time** is accented, beaten, and counted thus :—





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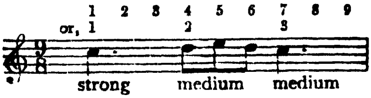
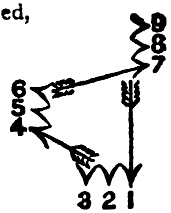
* In all these time-illustrations, the *point* of the arrow indicates the *end* of the beat.

111. **Compound Triple Time** is accented, beaten, and counted thus :—





DOWN three times, RIGHT or LEFT three times, UP three times.

112. **Compound Quadruple Time** is beaten in the manner shown in § 109, but DOWN three times, LEFT three times, RIGHT three times, UP three times.

113. When the **upper figure** of a time-signature is 2, the time is Simple *Duple* ; when it is 3, the time is Simple *Triple* ; when it is 4, the time is Simple *Quadruple.*

114. When the **upper figure** of a time-signature is 6, the time is Compound *Duple* ; when it is 9, the time is Compound *Triple* ; when it is 12, the time is Compound *Quadruple.*

115. The **lower figure** of a *Simple* time-signature shows the value of each beat in a bar ; thus 2 = minims, 4 = crotchets, 8 = quavers.

116. The **lower figure** of a *Compound* time-signature shows the value of one-third of the dotted note of which each beat consists ; thus 4 = crotchets, 8 = quavers, 16 = semiquavers.

117. The following are the time-signatures in general use :—

Fig. 34.

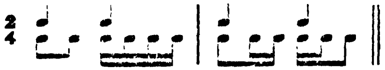
	DUPLE.	TRIPLE.	QUADRUPLE.
SIMPLE.	¢ or $\frac{2}{2}$ 𝅗𝅥 𝅗𝅥	$\frac{3}{2}$ 𝅗𝅥 𝅗𝅥 𝅗𝅥	¢ or $\frac{4}{2}$ 𝅗𝅥 𝅗𝅥 𝅗𝅥 𝅗𝅥
	$\frac{2}{4}$ ♩ ♩	$\frac{3}{4}$ ♩ ♩ ♩	C or $\frac{4}{4}$ ♩ ♩ ♩ ♩
	$\frac{2}{8}$ ♪ ♪	$\frac{3}{8}$ ♪ ♪ ♪	$\frac{4}{8}$ ♪ ♪ ♪ ♪
COMPOUND.	$\frac{6}{4}$ 𝅗𝅥. 𝅗𝅥.	$\frac{9}{4}$ 𝅗𝅥. 𝅗𝅥. 𝅗𝅥.	$\frac{12}{4}$ 𝅗𝅥. 𝅗𝅥. 𝅗𝅥. 𝅗𝅥.
	$\frac{6}{8}$ ♩. ♩.	$\frac{9}{8}$ ♩. ♩. ♩.	$\frac{12}{8}$ ♩. ♩. ♩. ♩.
	$\frac{6}{16}$ ♪. ♪.	$\frac{9}{16}$ ♪. ♪. ♪.	$\frac{12}{16}$ ♪. ♪. ♪. ♪.

118. Simple Quadruple time, with four crotchets in a bar ($\frac{4}{4}$), is very often called Common time.

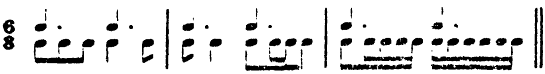
The old-fashioned sign C, which once indicated $\frac{4}{4}$ time, is now rapidly becoming obsolete. So too is the equally vague sign ₵, which was once used to indicate both two half-notes 𝅗𝅥 𝅗𝅥, or two whole notes 𝅝 𝅝, in a bar. The former was called **Alla breve** time; the latter was sometimes known as **Alla** Cappella (Church Time).

119. Instances of $\frac{5}{4}$ and of $\frac{7}{4}$ time are occasionally met with. These have respectively five and seven crotchets in a bar.

120. Every beat of Simple time can be subdivided into a group of notes, each group being equal in time to a simple or *undotted* beat-note :—



121. Every beat of Compound time can be subdivided into a group of notes, each group being equal in time to a compound or *dotted* beat-note :—



122. Every beat group of notes in a compound time is equivalent to a complete bar of *simple* triple time. Thus, each bar of $\frac{6}{8}$ time resembles two bars of $\frac{3}{8}$ time in succession.

123. In slow compound Duple time it is sometimes convenient to count six. These six counts fall into two groups of *three* each : 1 2 3, 4 5 6 ; 4 is in this case a *medium* accent.

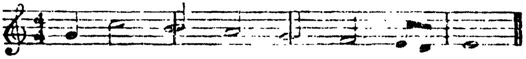
124. In slow simple Triple time it is also convenient to count six. These six counts fall into three groups of *two* each : 1 2, 3 4, 5 6 ; 3 and 5 are in this case medium accents.

125. The rhythm of a bar of triple time, or of any single group of compound time, is *more natural* as 𝅗𝅥 ♩ or ♩ ♪, than as ♩ 𝅗𝅥 or ♪ ♩. The latter groups may be regarded as *syncopated*.

126. Syncopation is the term used to express *disturbed accent.* The *weaker* beats of every measure may be occasionally made emphatic at the pleasure of the composer. This is usually done in **simple time** by *tying* the note on a *weak* beat to the next note on either a **strong** or a medium beat. The naturally accented note not being sounded afresh, the ear requires that the note to which it is tied should receive more than the ordinary accent, and be emphasized. Fig. 35 exhibits the ancient and modern methods of writing the same syncopated passage.

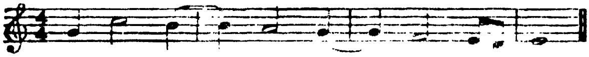
Fig. 35.

Ancient Method.

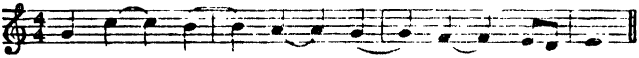


This method seems to have occasioned the use of the word *Syncopation,* which means, in musical language, *cutting into two parts.*

Modern Method.

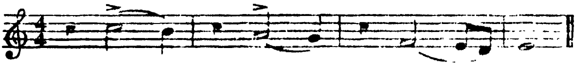


or :—



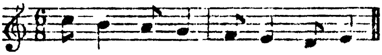
The accent may be broken by *rests* instead of tied notes as in Fig. 36 :—

Fig. 36.



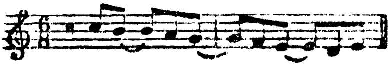
127. In **compound time** syncopation is sometimes effected by writing a group of two unequal notes, and causing the shorter of the two to be heard first :—

Fig. 37.



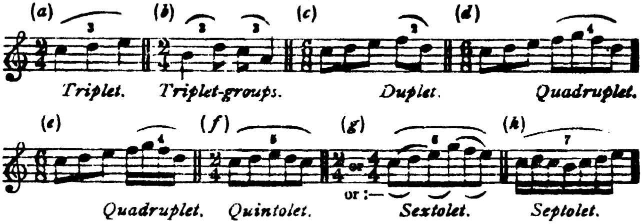
It can also be effected by tied notes :—

Fig. 38.



128. Sometimes notes are irregularly grouped. Occasionally *three* notes of equal value are written to be performed in the time of *two* of the same kind, a figure 3 being placed over or under the group, which is called a **triplet.** Fig. 39 (*a*). Sometimes two of the notes of a triplet may be sustained as *one.* Fig. 39 (*b*).

Fig. 39.



129. A **duplet** is—in compound time—a group of two notes played in the time of three of the same kind, the dotted beat being for the moment treated as though it were simple, *i.e.*, undotted. Fig. 39 (*c*).

130. A **quadruplet** is—in compound time—a group of four notes played in the time of three. Sometimes the four notes are written in the time-value of the three notes they temporarily displace, as in Fig. 39 (*d*); occasionally they are written in the time-value of those four notes which would together make up the value of the undotted beat-note they actually represent, as in Fig. 39 (*e*).

131. A **quintolet** is a group of five notes played in the time of four of the same kind. Fig. 39 (*f*).

132. A **sextuplet** or **sextolet** is a group of six notes formed either by the subdivision of a triplet, or by combining two triplets into one group. Both forms are played in the time of four ordinary notes of the same kind as those of the example itself. Fig. 39 (*g*).

133. A **septolet** or **septimole** is a group of seven notes played in the time of six or eight of the same kind. Fig. 39 (*h*).

A knowledge of Harmony is necessary for determining whether a *quintolet* should be played as 2 + 3, or 3 + 2; a *sextolet* as 3 + 3, or 2 + 2 + 2; or a *septolet* as 3 + 4, or 4 + 3.

CHAPTER VII.

HOW TO KNOW WHETHER A PIECE IS WRITTEN IN A MAJOR OR IN A MINOR KEY—HOW TO FIND THE KEY-SIGNATURE OF A GIVEN PASSAGE—HOW TO FIND THE TIME-SIGNATURE OF A GIVEN PASSAGE—HOW TO SUPPLY BAR-LINES TO A GIVEN PASSAGE—HOW TO RE-WRITE THE SAME PASSAGE WITH ALTERED NOTE-VALUES AFTER A DIFFERENT TIME-SIGNATURE—HOW TO FINISH AN INCOMPLETE BAR BY ADDING RESTS, ETC.

134. Since every key-signature belongs to **two different keys**, viz., a major key and its relative minor, it is convenient to have some rule for determining whether the key of any given passage be major or minor.

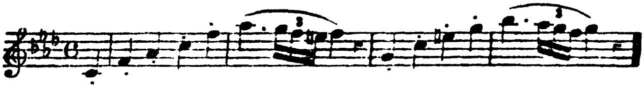
The leading-note of every minor scale being always indicated by an accidental, we know that a piece cannot be in a major key if its 5th degree is constantly being raised.

Such a note cannot be the *dominant* of any key. It can only be the leading-note, and the key-note is therefore one semitone above this accidentally-raised note.

For instance, in Fig. 40, although the key-signature has four flats, we know that the key cannot be A♭ major, since the note E♭ is not used at all, E♮ being used in its place. This fact, together with the *mental effect* of the entire passage, proves the key to be F minor.

Fig. 40.

BEETHOVEN



135. Very often (at Examinations) a passage of music is given in which many accidentals are used, and candidates are asked **to supply the key-signature.** The three following rules will be found useful for answering such questions :—

(i.) Ascertain, by the *kind* of accidentals used, whether the melody belongs to a scale with sharps or flats.

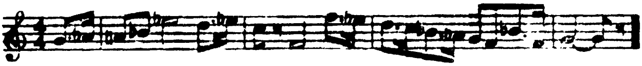
(ii.) See how many times the same note is affected by the same kind of accidental, and by this means separate the sharps or flats *belonging to the signature* from merely *chromatic* accidentals.

(iii.) Try and discover the key-note from the *general mental effect* produced by the melody; and, in doing this, determine whether the key be major or minor.

For instance, in Fig. 41 it is obvious at once that the melody belongs to a scale with *flats*.

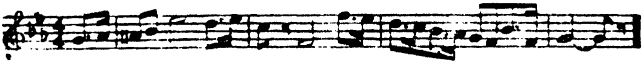
Fig. 41.

WEBER.



There are *two* A flats, *three* B flats, *three* E flats. The one A♮ is, then, evidently a *chromatic accidental.* As, therefore, there are *three* notes which are always written *flat*, the key must be *E♭ major*, because the three flats of that signature are B♭, E♭, A♭. The music cannot be in *C minor*, because there is no B♮ which, as the *leading-note*, is essential to that key. It will be observed that the melody does not begin nor end upon the key-note, which is usually the case. With its proper key-signature, the melody in Fig. 41 will appear as in Fig. 42. When the proper key-signature has been written, all unnecessary accidentals must be removed, so:—

Fig. 42.



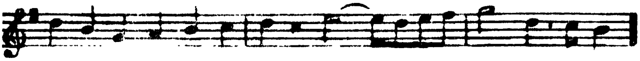
136. When asked to find the time-signature of a given melody, first look for the *note of smallest value* in the passage.

Add up the number of time-values of that kind contained in *all* the notes and rests given in the bar in which it occurs. Write this number as the upper figure of a time-signature, and place below it the time-value of these short notes as a fraction of a semibreve.

Regard the time-signature thus obtained as a vulgar fraction, reduce it to its "lowest terms," and then (judging by the grouping of the notes in the given melody) find the only possible time-signature which can be assigned to the passage.

For instance, in Fig. 43 it is absolutely impossible to know whether the time-signature is $\frac{3}{2}$ or $\frac{6}{4}$, by looking at the six crotchets in bar 1.

Fig. 43.

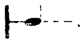
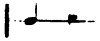
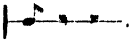


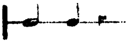
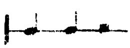
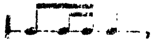
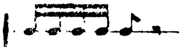
We therefore go on to bar 2, where we observe that quavers are the notes of smallest value. Since the time-values of the notes in bar 2 if added together = twelve quavers, we obtain the vulgar fraction $\frac{12}{8}$ in the way suggested. Reducing this fraction to its "lowest terms," we obtain $\frac{12}{8} = \frac{6}{4} = \frac{3}{2}$. But as $\frac{12}{8}$ time has four groups of three quavers, $\frac{6}{4}$ has two groups of six quavers, and $\frac{3}{2}$ has three groups of four quavers, we select $\frac{3}{2}$ as the proper time-signature for the given melody.

137. Sometimes an Examination paper requires **bar-lines to be supplied** to a given "un-barred" melody. In "barring" or dividing a passage of music into measures, the following hints will be found useful :—

(i.) As a rule, a bar-line should come before every note which is strongly accented.

(ii.) Bar-lines should be filled in, by beginning at the *end* of the given melody, proceeding *backwards*, rather than by working from left to right. This is especially the case where the given melody consists almost entirely of notes of equal value, as minims, crotchets, quavers, etc.

(iii.) If the last note of all be a long one, it will have a bar-line before it :— . Sometimes, however, the last note will be a *short* one, with a rest after it, as :  or .

(iv.) If a melody ends with a short note, preceded by a long note, the last bar-line will come before the long note :— . Sometimes, however, a final short note may be *unaccented*, if it be preceded by other short or shorter notes, as : , , or 

(v.) An incomplete bar at the end of a melody will indicate an incomplete bar at the beginning.

(vi.) **The first note of a group of quavers or semiquavers is nearly always a strong or medium accent.**

(vii.) **A strong or medium accent will never come in the middle of a minim or crotchet *rest*.**

(viii.) Two tied notes of *equal* value indicate *syncopation*, and will need a bar-line to be drawn between them.

(ix.) Quavers, and notes of less value, usually have their stems joined or grouped together.

(x.) Groups of *six* notes will usually denote a *compound time*, like $\genfrac{}{}{0pt}{}{6}{4}$, $\genfrac{}{}{0pt}{}{6}{8}$, $\genfrac{}{}{0pt}{}{9}{8}$, $\genfrac{}{}{0pt}{}{12}{8}$, etc., or a *simple triple* time, like $\genfrac{}{}{0pt}{}{3}{4}$ or $\genfrac{}{}{0pt}{}{3}{8}$.

(xi.) Groups of *four* notes will seldom belong to a compound time, they will generally denote a *simple* time.

(xii.) Groups of *three* notes will denote either simple triple, or *any* compound time.

(xiii.) Groups of *two* notes, if only used sparingly—here and there—may belong to almost any time: these will give no opportunity of judging where the strong accents come.

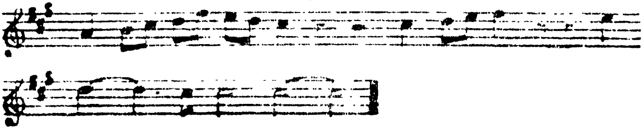
(xiv.) Many *dotted notes* used in succession, or many groups of two *unequal* notes (the second being half the value of the first), will invariably denote simple triple or *any* compound time.

(xv.) Having determined whether the time be simple or compound, a few experiments will soon determine the position of the strong accents.

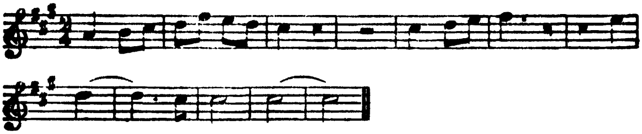
138. It often happens that more than one *possible* time-signature and system of barring can be supplied to a given un-barred melody.

For instance, the melody given in Fig. 44 can be barred in at least three different ways, viz., in Duple, Triple, and in Quadruple time:—

Fig. 44.

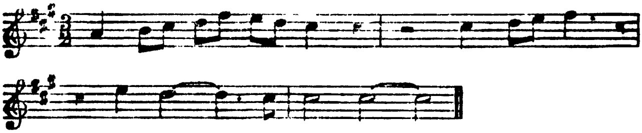


In *Duple time* it will appear thus:—



N.P.—A *semibreve* rest would more correctly express silence during the whole of bar 4. See § 141.

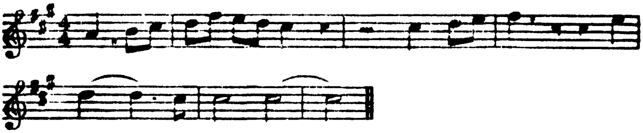
In *Triple time* it will take this form:—



N.B.—A *semibreve* would more correctly express the time-duration of the final note; two minims being rarely (if ever) tied together in the same bar.

The minim rest makes it impossible for this melody to be barred in $\frac{3}{4}$ time, for a bar cannot come in the middle of a rest.

In *Quadruple time* it will read thus:—



N.B.—This Quadruple time solution would gain the highest number of marks at an Examination, since it involves *no alteration whatever* in the notation of the given un-barred melody.

139. An Examination paper very frequently requires that the notes in a given melody shall be either doubled or halved in time-value, and that the whole passage be re-written, with a different time-signature. This is a simple process. If the notes are to be *doubled* in time-value, find the new time-signature by keeping the upper figure of the given time-signature as it stands, and *divide* the lower figure by 2. Thus $\frac{3}{4}$ will become $\frac{3}{2}$, $\frac{9}{16}$ will become $\frac{9}{8}$, etc.

If the notes are to be *halved* in time-value, find the new time-signature by keeping the upper figure of the given time-signature as it stands, and *multiply* the lower figure by 2. Thus $\frac{2}{2}$ will become $\frac{2}{4}$, $\frac{6}{4}$ will become $\frac{6}{8}$, etc.

Or, perhaps the new time-signature will be given, and it will be left for the candidate to find out whether the new notes are to be double or half the time-value of the given notes. In this case, observe the *lower* figure in both time-signatures. If the *new* lower figure be *less* than the original, *double* (or treble) the time-value of the notes; if it be greater, *halve* (or quarter) them.

140. Examination candidates are also frequently asked **to complete unfinished bars with rests.** The following hints will be found useful :—

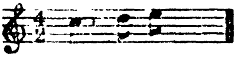
(i.) Write first a complete bar of equal notes in the time given, according to the number of the *upper* figure of the time-signature.

(ii.) *Group* these equal notes into simple or compound rhythm, as shown by the time-signature.

(iii.) Place beneath your bar of equal notes, the note or notes given originally, and then complete the bar with rests.

For instance, suppose rests are required to complete the fragment of a bar shown in Fig. 45 :—

Fig. 45.



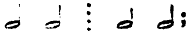
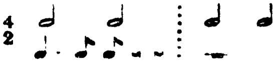
A complete bar of notes in $\frac{4}{2}$ time is ; these we divide into two groups, as shown by the dotted line. Next, if we place beneath these notes those which are given in Fig. 45, we see exactly what rests are required to complete the bar, as in Fig. 46 :—

Fig. 46.



(iv.) In triple time, *one* rest is never used to express silence for the duration of two-thirds of a bar.

(v.) In compound times, a dotted rest is frequently employed to express the value of a compound beat (dotted note).

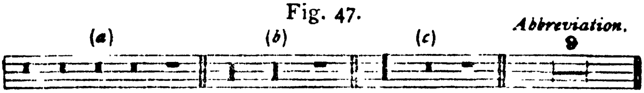
(vi.) In quadruple time (simple or compound), *one* rest is usually written to express continuous silence for half a bar.

(vii.) No strong nor medium accent should be allowed to fall in the *middle of a rest.* The beats should be clearly *seen.*

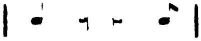
141. A semibreve rest is used to denote **silence during a complete bar,** in *any* kind of time.

142. To express **a rest of longer duration than one bar,** it was formerly the custom to employ thick lines drawn perpendicularly through the spaces between the lines of the staff. Thus, a line drawn through *one* space—like a breve rest—implied a rest of two bars' duration, one drawn through *two* spaces meant a rest of four bars, through *three* spaces six bars. The modern custom is to draw a thick *horizontal* line in the midst of the staff, and to write above it the number of the bars to be counted in silence. Fig. 47 shows how to express a rest of nine bars' duration in three different ways, and also the simple abbreviation of the same:—

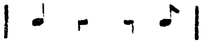
Fig. 47.



143. Sometimes notes are given at the beginning and end of an unfinished bar, and candidates are asked to correctly supply the rests necessary to complete the bar. It will be well to remember that, in $\frac{6}{8}$ time, when a bar begins with a crotchet and ends with a quaver, silence between these two notes will be indicated by two rests, thus:—

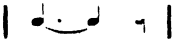


In $\frac{3}{4}$ time, when a bar begins with a crotchet and ends with a quaver, silence between these two notes will be indicated by two rests, thus:—

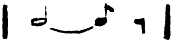


Sometimes the intermediate rests are given, and the candidate is required to supply the notes omitted at the beginning and end of the incomplete bar. The rules just given will be equally useful for the solution of such problems.

144. In $\frac{6}{8}$ time, a sound of the length of five quavers would be represented by two tied notes, thus:—



In $\frac{3}{4}$ time, a sound of the length of five quavers would be represented by two tied notes, thus:—



CHAPTER VIII.

DIATONIC AND CHROMATIC INTERVALS WITHIN THE OCTAVE, WITH THEIR INVERSIONS.

145. A **interval** is the difference in pitch, or *scale-distance*, between any two sounds.

146. A **melodic interval** = two sounds struck and heard in *succession*, one after the other. A **harmonic interval** = two sounds struck and heard *together*.

147. Intervals have **numerical** and **qualifying** names.

148. The **numerical name** of an interval depends upon the number of lines and spaces of the staff covered by the interval. This number includes the staff-positions (*viz.*, lines or spaces) occupied by the two notes forming the interval. Thus, an 8ve includes the line and space in which the upper and lower notes themselves stand, and the three lines and three spaces between—*eight* staff-positions in all. Accidentals do not affect the numerical name of an interval.

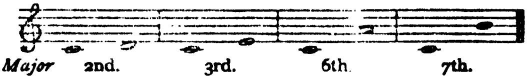
149. The **qualifying name** of an interval depends upon its absolute width, *i.e.*, upon the number of semitones it contains.

150. The *ascending* major scale is the **standard of measurement** for finding the qualifying name of an

interval; but the student is advised to learn *by ear* the effects produced by the different qualities of intervals.

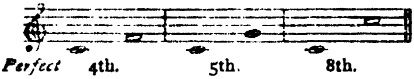
151. The intervals between any note and the 2nd, 3rd, 6th, and 7th degrees of the major scale which begin on that note are major :—

Fig. 48.



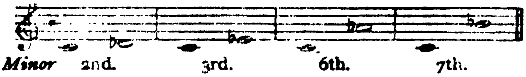
152. The intervals between any note and the 4th, 5th, and 8th degrees, both of the major and minor scales which begin on that note are perfect :—

Fig. 49.



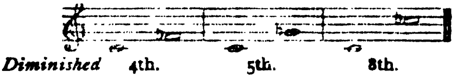
153. An interval is called minor when it is a chromatic semitone smaller than a major interval. It must be observed that the notes forming the minor interval still retain the same *alphabetical names* as those of the major interval. Compare Fig. 50 with Fig. 48 :—

Fig. 50.



154. If a perfect interval be made smaller by a chromatic semitone, *the same alphabetical names being retained*, the interval then becomes diminished :—

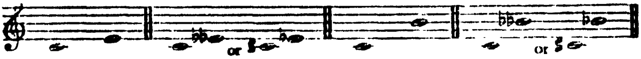
Fig. 51.



The diminished 8ve being the "enharmonic equivalent" of a major 7th does not belong to either a Diatonic or Chromatic scale. It is not therefore in general use.

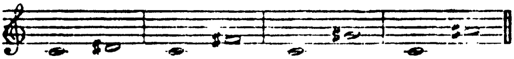
If a *major 3rd or 7th* be made smaller by *two* semitones, *the same alphabetical names being retained*, the interval then becomes **diminished** :—

Fig. 52.



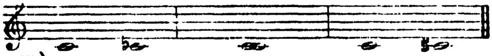
155. If a *major* 2nd or 6th, or a perfect 4th or 5th, be made *larger* by a chromatic semitone, an **augmented** interval is formed :—

Fig. 53.

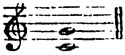
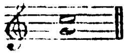


156. Though not (in its perfect shape) an *interval*, the **prime or unison** (a duplication of the same note) must be considered here, on account of its diminished and augmented conditions :—

Fig. 54.


Chromatic semitone below.
Chromatic semitone above.
Prime or Unison } Diminished.
Perfect.
Augmented.

157. Intervals may be **inverted** by placing the lower note an octave higher, or the upper one an octave lower :—

Thus  inverted is 

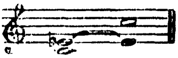
By inversion, a different interval is produced by notes of the same name—a fifth becomes a fourth, an octave becomes a unison, etc.

158. **How to find the inversion of an interval.** By subtracting the number of the given interval from 9, the remainder gives the inversion—thus, to find the inversion of a 3rd, subtract 3 from 9, and the remainder, 6, will show that the inversion of a 3rd is a 6th.

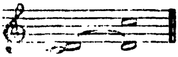
By adding together the numerical name of any interval less than an 8ve and that of its inversion, the total will always be 9. This total is 9 (and not 8), because the note which is unaltered in pitch gets counted *twice*.

159. **The quality of an interval is changed by inversion,** with the exception of perfect intervals, **which** remain perfect. Major intervals become minor, and minor become major; augmented become diminished, and diminished augmented :—

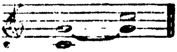
Thus a minor 3rd will become a major 6th,



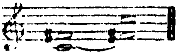
„ major 2nd „ „ minor 7th,



„ perfect 5th „ „ perfect 4th,

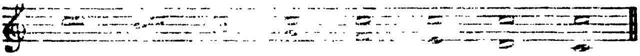


„ an augmented 4th „ „ diminished 5th,



160. By the same law of inversion, the intervals between the upper tonic and the notes of the descending **major scale** are either *minor* or perfect. In the ascending major scales these intervals were either *major* or perfect.

Fig. 55.



161. Examination questions on intervals take various forms. Candidates may be asked :—

(i.) To state the numerical and qualifying names of a given interval.

(ii.) To write a certain interval *above* a given note.

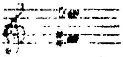
(iii.) To write a certain interval *below* a given note.

(iv.) To write certain intervals which belong to given keys.

(v.) To write the *inversion* of any given interval.

Hint I.—**How to find the numerical and qualifying names of a given interval.** First count the number of lines and spaces covered by the interval set, taking no account of any accidental which may be prefixed to either or both of the given notes. Ascertain the qualifying name of the plain interval *without accidentals*, by regarding the upper note as one of the degrees of the diatonic major scale which begins

on the lower note. Then ascertain how many chromatic semitones have to be added or subtracted from this result by the nature of the accidentals used.

For example, suppose  is the given interval. Without accidentals this would be a major 7th, since E♮ is the seventh degree of the major scale of F♮. The ♭ to the E and the ♯ to the F reduce the width of the interval by two chromatic semitones. By § 154 any interval which is two chromatic semitones less than major is *diminished*. Consequently the given interval is a diminished 7th.

Hint II.—How to find any interval above a given note. First write the given note without an accidental (should there be one). Then write above it, in the correct line or space, the bare note required by the numerical name of the given interval. Prefix the accidental to the lower note (if there is one given in the question). Consider this *lower note as the tonic of its own major scale*, and then, if necessary, raise or lower the upper note to obtain the quality of the interval asked for.

For example, suppose you are asked to write the augmented 4th above A♭. Write A♮ on the staff, and above it the fourth note D♮. This will be a perfect 4th, the subdominant of A major. Prefix the ♭ to the given A. The lowering of this note by a chromatic semitone alters the perfect 4th into an augmented 4th, which is the interval required.

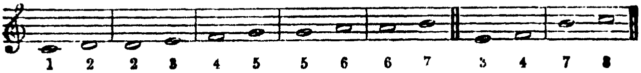
Hint III.—How to write any interval below a given note. First write the given note without an accidental. Then below it, in the correct line or space, the bare note required by the numerical name of the given interval. Prefix the accidental to the upper note (if there is one given in the question). Consider this *upper note as the upper tonic of its own major scale* (as shown in Fig. 55), and then, if necessary, raise or lower the other note to obtain the quality of the interval asked for.

For example, suppose you are asked to write the diminished 7th below D♯. Write D♮ on the staff, and below it the seventh note, E♮. This will be a *minor* 7th, since D♯ is the leading-note (*i.e.*, major 7th) of E. Prefix the given sharp to D. This makes the interval a major 7th. A diminished 7th being two chromatic semitones less than a major 7th, the lower note E will require a double sharp to be prefixed, in order to make the interval below the given note D♯ a diminished 7th.

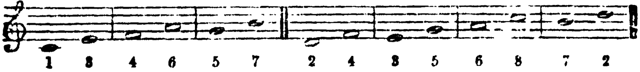
162. **Diatonic intervals** are those which lie between any two notes of a diatonic scale. The **intervals contained in both major and minor scales** must now be learnt, and be afterwards re-written in other keys than that of C.

The following intervals are contained in the Major Scale of C:—

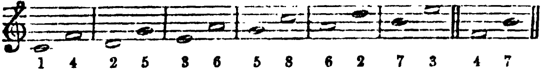
Five major 2nds, each containing two semitones. Two minor 2nds or semitones.



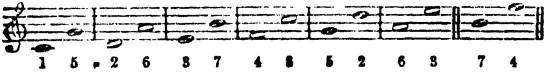
Three major 3rds, each containing four semitones. Four minor 3rds, each containing three semitones.



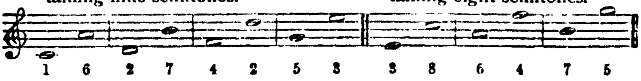
Six perfect 4ths, each containing five semitones. One *augmented* 4th, containing three whole tones.



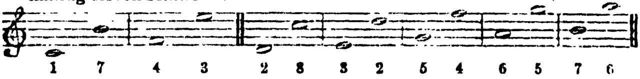
Six perfect 5ths, each containing seven semitones. One *diminished* 5th, containing six semitones.



Four major 6ths, each containing nine semitones. Three minor 6ths, each containing eight semitones.



Two major 7ths, each containing eleven semitones. Five minor 7ths, each containing ten semitones.

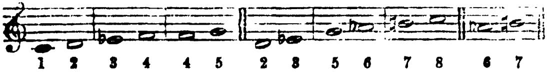


163. The **augmented 4th** occurs in only one place in the major scale, viz., between the sub-dominant and the leading-note; that is to say, *between the flattest and sharpest notes in the key.* It is often called the **tritone** because of the three whole tones comprised within its limits.

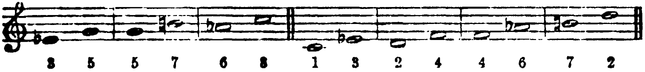
164. Observe that the augmented 4th and the diminished 5th are identical as to the number of semitones. Each contains *six*, but the augmented 4th occupies only *four* staff-positions (or four letter-names—F, G, A, B), whilst the diminished 5th occupies *five* staff-positions (or five letter-names—B, C, D, E, F).

165. The following intervals are contained in the Minor Scale of C (Harmonic form):—

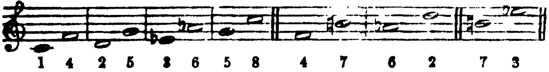
Three major 2nds. Three minor 2nds. One augmented 2nd, containing three semitones.



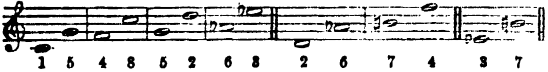
Three major 3rds. Four minor 3rds.



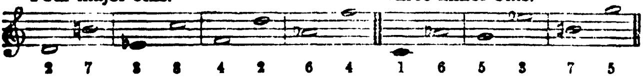
Four perfect 4ths. Two augmented 4ths. One diminished 4th, containing four semitones.



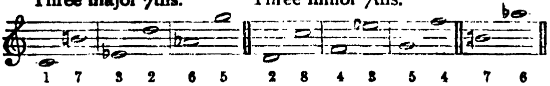
Four perfect 5ths. Two diminished 5ths. One augmented 5th, containing eight semitones.



Four major 6ths. Three minor 6ths.



Three major 7ths. Three minor 7ths. One diminished 7th, containing nine semitones.



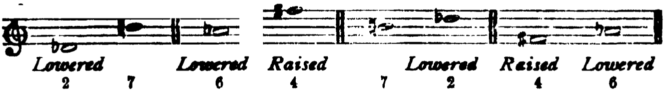
The **augmented 4th** occurs in *two* places in the harmonic minor scale, viz., between the 4th and 7th, and 6th and 2nd degrees. The **augmented 5th** occurs between the 3rd and 7th degrees, and there is an **augmented 2nd** between the 6th and 7th degrees. Observe the inversions of these augmented intervals as two **diminished 5ths**, one **diminished 4th**, one **diminished 7th**.

The student is strongly urged to construct Tables of Intervals, similar to those above, in several of the sharp and flat keys, marking, however, the sharps and flats as accidentals.

166. The only augmented and diminished intervals common to both diatonic and chromatic scales are those altered from the perfect intervals (the 5th and 4th), and also the augmented 2nd, and its inversion the diminished 7th.

167. The only **intervals peculiar to the chromatic scale** in general use are the augmented 6th and its inversion the diminished 3rd. These occur between the scale degrees specified in Fig. 56 :—

Fig. 56.



168. Viewed *harmonically*, intervals are either **concords** or **discords**.

169. A **concord** leaves a *finished*, *satisfied* effect upon the ear, when the two sounds are heard together; a **discord** leaves an *unfinished*, *unsatisfied* effect.

A **concord** used melodically is, generally speaking, *easy to sing*; a **discord** used melodically is sometimes *not* easy to sing.

170. There are **two kinds of concords**—Perfect and Imperfect.

171. The **perfect** concords are the prime or unison, the octave, 5th, and 4th. See Figs. 49 and 54.

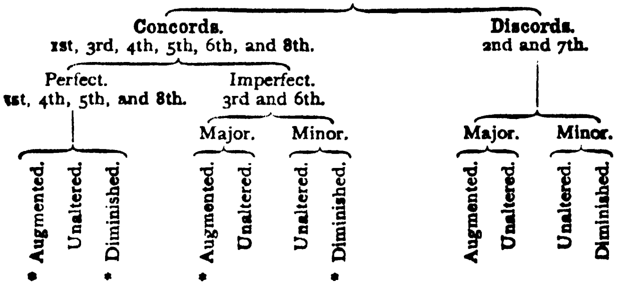
172. The **imperfect concords** are the major and minor 3rd, and the major and minor 6th. See Figs. 48 and 50.

173. The **discords** are the major and minor 2nd and the major and minor 7th (both of which are formed by taking two notes in alphabetical order, as C D, C B, etc., see Figs. 48 and 50), and all diminished and augmented intervals. See Figs. 51 to 54.

174. **Fig. 57 shows the classification of intervals at a glance :—**

Fig. 57.

Intervals.



The four chromatically altered intervals marked * are *discords.*

Candidates, when *listening* to ear tests at a Practical Examination, will do well to remember that 3rds and 6ths are *major*, when they respectively sound as the third and sixth degrees of a major scale ; they are *minor*, when they sound as the same degrees of a minor scale. But 2nds and 7ths are *major*, and unisons, 8ves, 5ths, and 4ths, are *perfect* when sounded after the tonic in both major and minor scales.

175. A **simple** interval is one which does not exceed the compass of an 8ve.

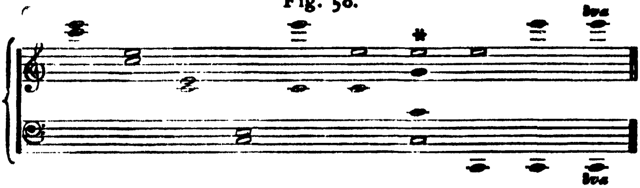
176. A **compound** interval is one which has a wider compass than an 8ve.

177. A 9th is always regarded in harmony as a compound interval.

178. With the exception of the 9th, compound intervals are generally considered as simple, although they may include an 8ve (or several 8ves) in their compass. Thus, any E would be considered as a 3rd above C, no matter how wide the distance may be between the C and the E above it ; or how

many notes may be written *between* the C and E, as at * in Fig. 58 :—

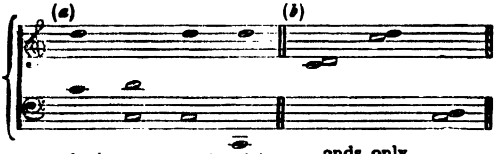
Fig. 58.



All the intervals in Fig. 58 are regarded as 3rds, because the names of the two notes in each are C and E.

179. A 9th may sometimes be regarded as a compound 2nd; but a 2nd can under no circumstances whatever be used for a 9th, in the same way that a 3rd can be used for a 10th.

Fig. 59.



9ths (or compound 2nds). 2nds only.

In the 9th, the upper note is the discord; in the 2nd, the lower note is the discord.

CHAPTER IX.

TRANSPOSITION OF A GIVEN MELODY FROM TREBLE CLEF TO BASS CLEF, OR *vice versa*, AND FROM ONE KEY TO ANOTHER—HINTS FOR EXAMINATION CANDIDATES.

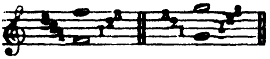
Examination candidates are often asked to re-write a given passage of melody :—

(i.) An octave higher or lower, using the *same* clef.
(ii.) An octave higher or lower, using a *different* clef.
(iii.) Two octaves higher or lower, using a different clef.
(iv.) At the same pitch, using a different clef.
(v.) At a different pitch, in a different key.

We have already learned (*Preparatory Text-Book*, Chap. III.) how to re-write a melody an 8ve higher or lower, **using the same clef.**

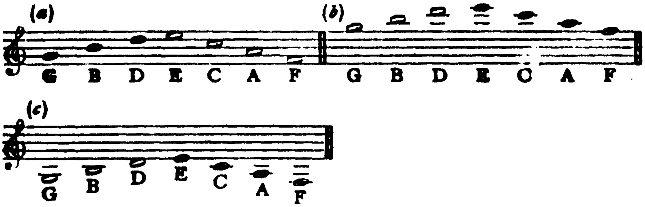
Hint I.—The chief thing to remember is that there are three lines and three spaces between any two notes which lie an octave apart :—

Fig. 60.



Consequently the given passage, Fig. 61 (*a*), will appear an 8ve higher at (*b*), and an 8ve lower at (*c*) :—

Fig. 61.

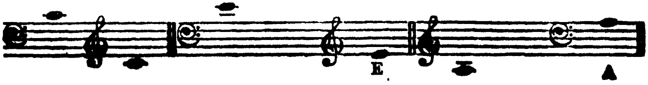


Hint II.—When transposing an octave higher or lower, **using the same clef, all leger lines, and spaces between leger lines,** must be counted as if they were lines and spaces of the staff itself.

Hint III.—When transposing an octave higher or lower, **using a different clef,** it may help us if we remember the relative position of Middle C to both clefs. See Fig. 62 (*a*). The second leger line above the Bass staff (E) has exactly the same pitch as the bottom line of the Treble staff—Fig. 62 (*b*); and in the same way, the second leger line below the Treble staff (A) has exactly the same pitch as the top line of the Bass staff—Fig. 62 (*c*) :—

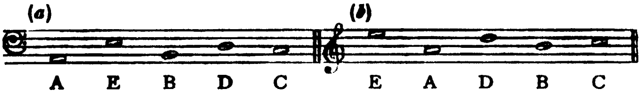
Fig. 62.

(*a*) "Middle C." (*b*) E is the same as :— (*c*) A is the same as :—

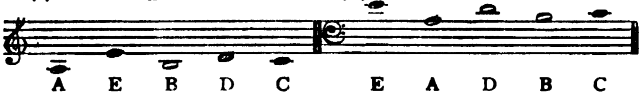


Consequently, the passages, Fig. 63 (*a*) and (*b*), will respectively appear as at (*c*) and (*d*), when transposed an octave, using different clefs :—

Fig. 63.



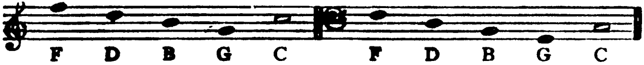
(*c*) An 8ve higher. (*d*) An 8ve lower.



Hint IV.—To transpose a melody **two octaves**, higher or lower, using a different clef, is really easier than to transpose it *one* octave. All we have to remember is this :—

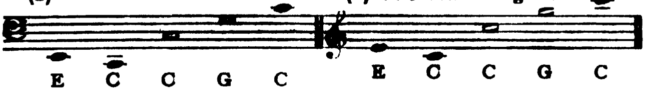
(i.) In changing the clef from Treble to Bass, write the new notes on the next lines or next spaces *below* those occupied by the given notes :—

Fig. 64.


(*a*) (*a*) Two octaves lower.

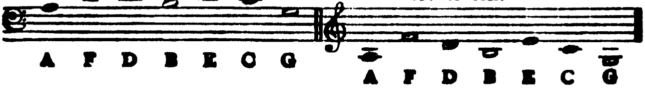
(ii.) In changing the clef from Bass to Treble, write the new notes on the next lines or next spaces *above* those occupied by the given notes :—

Fig. 65.


(*a*) (*a*) Two octaves higher.

Hint V.—A correct knowledge of the relative position of "Middle C" to both Treble and Bass clefs will also help us very considerably when transposing a melody **from clef to clef, keeping its notes at the same pitch.**

Fig. 66.


(*a*) (*b*) The same notes with the Treble clef.

Hint VI.—When an Examination paper requires that a given melody shall be transposed from one key to another, first see whether the melody has to be transposed *up* or *down*.

Hint VII.—Next see how *much* higher or how *much* lower in pitch the melody has to be re-written. Some interval will be named for this purpose—such as a major 3rd, perfect 4th or 5th, minor 6th, or major 7th, etc., higher or lower.

Hint VIII.—Then examine the given melody, carefully observing whether its key be major or minor, and so find its key-note or tonic.

Hint IX.—Next, find the *new* key-note or tonic; in other words, determine by the specified interval the note which is so much higher or lower than the tonic of the given melody.

Hint X.—Then write the new clef required, and the new key-signature.

Hint XI.—Add the time-signature of the given melody *after* your new key-signature.

Hint XII.—Then, beneath every note of the given melody, write (in pencil, to be afterwards rubbed out) the number of its scale-degree.

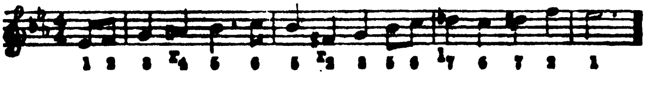
Hint XIII.—Write a small r before every accidentally *raised* degree, and a small l before every accidentally *lowered* degree.

Hint XIV.—Finally, in the new key, write the degrees you have numbered, taking care that every interval goes up or down, as in the original.

Hint XV.—When transposing from a key with flats to one with sharps (or *vice versa*), be most careful to ascertain from your new key-signature whether l will = ♭ or ♮, or r will = ♯ or ♮.

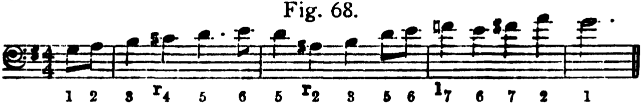
For instance, suppose Fig. 67 to be the given melody. It is required to be transposed a minor 6th lower, and to be re-written in the Bass clef.

Fig. 67.



The original key is E♭ major. The minor 6th below E♭ is G. We first write the Bass clef and signature of G major, adding the time-signature $\frac{4}{4}$. The transposed melody will appear thus :—

Fig. 68.



Hint XVI.—There will be, perhaps, a certain amount of temptation to re-write the melody an octave lower than it appears in Fig. 68 ; but as this would be transposing at a greater difference of pitch than the minor 6th required, the working of the question in this way would fail to satisfy the Examiners.

Hint XVII.—There are several points of detail connected with good music-writing, which candidates would do well to observe :—

(i.) See that the clef is nicely formed.

(ii.) See that the sharps or flats in the key-signature are placed on or in the proper lines and spaces.

(iii.) See that the time-signature is correctly copied, with no line inserted between its two figures.

(iv.) See that the stems of the notes are correctly placed—to the *right* of the notes, if turned up ; to the *left*, if turned down. All notes *below* the middle staff-line have their stems turned *up* ; all *above* the middle staff-line have their stems turned *down*.

(v.) Accidentals are placed *before* the notes to which they refer. No accidental should be omitted.

(vi.) No dot after a note is ever placed upon a line.

(vii.) A dotted note upon a line has its dot placed in the space *above*, if the next note be higher than the dotted note. The dot is placed in the space *below*, if the next note be lower than the dotted note.

(viii.) Leger lines should be written before the notes are placed upon them. The first leger line should be parallel to the staff, at the same distance from it as the width of the spaces between the lines of the staff. Every fresh leger line should be placed at the same distance from the previous one. Leger lines are only an extension of the five-lined staff.

In connection with Hint IV., it may be remarked that a slower (but perhaps *safer*) method of transposing a melody up or down *two octaves*, is first to transpose it *one* octave in the required direction (according to the directions given in Hint III.), and then to repeat the same process for the *second* octave.

CHAPTER X

WORDS AND MARKS OF EXPRESSION, ETC.

180. Italian words, or their abbreviations, are used to show in a musical composition :—

(i.) **Intensity,** *i.e.*, the degree of tone (loudness or softness) required ;

(ii.) **Speed,** *i.e.*, the time or pace (fast or slow) at which the music is to be taken ;

(iii.) **Expression,** *i.e.*, the manner or style in which it should be performed ; and also

(iv.) **General directions** to the performer.

181. The following terms, etc., are used in connection with **fixed degrees of intensity :—**

Pianissimo (*ppp* : *pp*) = very soft. The utmost degree of pianissimo is sometimes expressed by the word *Estinto* (almost extinguished).

Piano (*p*) = soft ; *Mezzo piano* (*mp*) = half soft, or moderately soft.

Mezza voce (*m.v.*) = medium tone—literally, half the voice.

Forte (*f*) = loud ; *Mezzo forte* (*mf*) = half loud, or moderately loud.

Fortissimo (*fff* ; *ff*) = very loud.

182. **A gradual increase of tone** is denoted by :—
Crescendo (*cresc.* ; *cres.* ; or <).

183. **A sudden increase of tone** is denoted by :—

Rinforzando (*Rinforz.* ; *rf*) = reinforcing, strengthening, emphasizing.

Sforzando (*sfz* ; *sf*) = forcing the tone. > ∧ are also signs to denote sudden accent.

184. **A gradual decrease of tone** is denoted by :—

Diminuendo (*dim.* ; or >).

Decrescendo (*decres.*) also means a gradual decrease of tone. Other words which have much the same meaning are :—

Mancando = failing, or waning in tone.

Raddolcendo, or *Raddolcente* = becoming gradually softer.

Scemando = diminishing in power.

Smorzando (*smorz.* or *smor.*) = extinguishing the tone.

Morendo }
Diluendo } = dying away.

185. **A gradual increase of tone and pace combined** is denoted by :—

Incalzando = quicker and louder.

186. **A gradual decrease of tone and pace combined** is denoted by :—

Calando = softer and slower.

Perdendŏsi = " losing itself "—by getting softer and slower.

187. The following terms, etc., are used in connection with **fixed degrees of Speed or Pace** :—

Grave	..	Extremely slow ; solemn, grave.
Lento	..	Very slow.
Lentamente	..	Rather slowly.
Larghissimo	..	Very broad.
Largo	..	Broad ; slow ; grand.
Largamente	..	Broadly ; massively.
Larghetto ..	..	Rather broadly.
Adagissimo	..	Very slow.
Adagio	..	Leisurely, slow.
Adagietto ..	..	Rather leisurely.
Andante	..	Going at an easy pace (*lit* " walking ").
Andantino ..	..	Not as slow as Andante.

Moderato	Moderate speed.
Tempo ordinario	Ordinary speed.
Tempo commodo	Convenient, *i.e.*, comfortable speed.
Allegretto	Rather quick, but not as fast as Allegro.
Allegro	Quick; merry; gay.
Allegramente	Quickly; cheerfully.
Vivace	Brisk; lively—very similar to Allegro, with which it is sometimes combined.
Vivacemente	Rather lively.
Vivacissimo	Extremely lively (very much like Presto).
Presto	Very quick.
Prestissimo	Quicker than Presto; as quickly as possible.
Prestissimamente	

Other words which indicate a more or less fixed degree of pace are :—

Tosto = quick; rapid.
Celere = quick; nimble.
Veloce = swiftly.

188. **A gradual quickening of the pace** is denoted by :—

Accelerando (*accel.*) = getting gradually faster.
Calcando = hurrying the time.
Incalzando = quicker *and louder.*
Stringendo (*string.*)
Stretto
Più stretto = pressing onwards; hurrying the time
Affrettando (*affret.*)

189. **A gradual slackening of the pace** is denoted by :—

Rallentando (*rall.*) = gradually getting slower.
Ritardando (*ritard.*)
Ritenuto (*rit.*) = retarding or keeping back the time.
Slentando (*slent.*)
Slargando (*slar.*)

See also the words *Calando* and *Perdendosi* in § 186.

190. **Comparative pace-indications** are :—

A tempo=In time, *i.e.*, after a Rall. or Accel., or their equivalents.

Tempo Giusto=In strict, or *exact* time.

Doppio Tempo, or *Doppio Movimento*=In double time, *i.e.*, as fast again as the preceding movement.

L'istesso tempo=In the same time as the preceding movement. This term is used when the time-signature is changed, but the ***beats*** are still to be of the same length as before.

Tempo Primo=In the same time *as at first*.

Ad libitum, or *A piacere*=At the performer's pleasure, as regards time.

Più mosso=*more* moved, *quicker* at once.

Meno mosso=*less* moved, *slower* at once.

Più lento=more slowly.

191. **The Metronome** is an instrument invented for the purpose of accurately measuring the time or *speed* of a piece of music. Clockwork mechanism inside sets in motion an outside pendulum, the speed of which is regulated by a sliding weight, according to the various grades of time measured on the index. The Metronome should beat once a second, or 60 times a minute, if set at 60.

For example, ♩=126 means that the sliding weight should be set to 126 on the index, when, on the instrument being set in motion, the beats of the pendulum show the speed of the *crotchets*.

𝅗𝅥=80 means that the weight should be set at 80, when the pendulum beats show the speed of the *minims*.

Another and a far simpler kind of metronome consists of a tape marked off into certain fractions of a minute. This tape is coiled into a metal case by means of a spring, and can be used in the manner of a pendulum.

The tape being drawn out of its case until the required number appears, is then secured in that place by means of a stud. Upon causing the metal case (which acts as the *weight* of the pendulum) to swing steadily, the required tempo will be accurately indicated.

192. The following lists of Italian words which are used to denote the manner and style of performance which the composer desires, as well as his general directions, etc., will be found to comprise most of the terms which are to be met with at the present day. These lists are by no means exhaustive; but they will meet the Examination requirements, in view of which they have been prepared.

List I.—Italian words indicating Expression, etc.

Agitato	In an agitated manner.
Animato	Animated.
Appassionato	Impassioned: with emphatic pression.
Cantabile; *Cantando*	In a singing style.
Capriccioso	Fanciful; capricious.
Con anima	With soul, *i.e.*, life.
Con brio	With vivacity.
Con delicatezza	In a refined manner.
Con dolore; *con duolo*	With grief.
Con espressione	With expression.
Con energia	With energy or force.
Con fuoco	With fire.
Con grazia	With grace.
Con moto	With motion, *i.e.*, rather fast.
Con spirito	With spirit.
Con tenerezza [*ten-er-ét-sah*]	With tenderness.
Deciso	Decided, *i.e.*, with firmness.
Delicatamente ***Delicato*** [*del-e-káh-toh*]	Delicately; refined.
Dolce [*dól-chay*] ***Dolcemente*** [*dól-chay-mén-tay*]	Sweetly, gently.
Dolente; *Doloroso*	With grief.
Energico	In an energetic manner
Feroce	Fiercely.
Fieramente	With vehement energy.
Forza	Force or emphasis.
Fuoco	See *Con fuoco*.
Furioso	Impetuously; with fury.
Giocoso ***Giocosamente*** [*gee-oh-kóh-sa-mén-tay*]	Jocosely; humorously.

Giojoso	Mirthful.
Giusto	Right; exact.
Grandioso	Grandly.
Grazioso [*grat-see-óh-soh*]	Gracefully; daintily.
Legato [*lay-gáh-toh*]	Smoothly and connectedly.
Leggiero; *Leggieramente*	Lightly.
Maestoso [*may-stoh-soh*]	Majestic.
Marcato	Marked.
Martellato	With great force; hammered.
Mesto [*máy-stoh*]	In a pensive, sad manner.
Mosso	Moved, *i.e.*, fast.
Moto	See *Con moto.*
Pastorale	In a pastoral style.
Pesante [*pay-sáhn-tay*]	Heavily; in a ponderous manner.
Piacevole [*pee-ah-chév-o-lay*]	In a pleasing manner.
Piangevole [*pee-an-jév-o-lay*]	Plaintively.
Pomposo	Pompously.
Risoluto [*rees-oh-lóo-toh*]	In a resolute manner.
Risvegliato [*rees-váy-lyee-ah-toh*]	Very animated.
Rubato	Robbed.
Scherzando; *Scherzoso*	In a sprightly, playful manner.
Semplice [*sem-plée-chay*]	Simply.
Serioso	Seriously.
Soave	Sweetly; gently; pleasantly.
Sonore	Sonorous.
Sostenuto	Sustained.
Sotto voce	In a subdued manner; in an ***under*-tone.**
Tempo rubato	Robbed time; the slight alterations by acceleration or retardation
Teneramente *Con tenerezza*	
Tranquillo *Tranquillamente*	
Vigoroso	Vigorously; with force.
Vivo; *Con vivacità*	With vivacity.
Volante	In a light, flying manner.

193. List II.—Italian Ajectives, Prepositions, etc., used before other words.

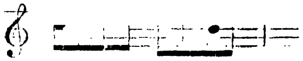
A	At ; for ; with ; to ; by ; in.
Al, *All'*, *Alla*	In the style of.
Assai	Very.
Bene, or *Ben*	Well.
Coi, or *Cogli*	With the.
Col ; (=*con il*) or *Colla* (=*con la*)	With the.
Con	With.
Da	From.
Dal (=*Da il*)	From the ; *Dal segno*, from the sign.
Di	Of ; from : to ; by.
Il or *La*	The.
Ma	But.
Meno	Less.
Mezzo	Half.
Molto, or *Di molto*	Much ; very much.
Nel, or *Nei* *Nella* ; *Nelle* ; *Nello*	In the.
Non	Not.
O	Either ; or.
Più	More.
Pochettino ; *Pochetta* ; *Pochino*	Very little.
Poco, or *un poco*	A little.
Poi	Then ; after ; thereupon.
Quasi	Almost ; as it were ; as if.
Sempre	Always.
Senza	Without.
Sul' ; *Sull'* ; *Sulla*	On the.
Tanto	As much.
Troppo	Too ; too much.
Un, or *Una*	A ; an ; one.

Many of the words in List II. are frequently taken in conjunction with some of those in §§ 181-190, and in List I. These have an intensifying or qualifying effect. Some of such compound terms are here given as examples. Many others are in general use, but the student will have no difficulty in understanding their meaning, if the contents of the previous lists of terms have been thoroughly learned.

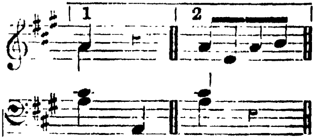
Allegro animato	Quick ; animated.
,, *commodo*	A convenient *Allegro*—comfortably fast.
,, *con anima*	Quick, with life (spirit).

Allegro con fuoco	Quick, with fire.
,, *moderato*	Moderately quick.
,, *molto*	Very quick.
,, *non tanto*	Not so quick.
,, *non troppo*	Not too quick
,, *vivace*	Lively and brisk.
Poco a poco cres.	Getting louder little by little.
Andante con moto	A trifle faster than *Andante* alone.
Andante quasi Allegretto	Faster than *Andante*, almost as if *Allegretto*.
Ben marcato	Well marked.
Meno allegro	Less quick.
Sempre più crescendo	Continually increasing in tone.
Presto assai	Very quick.

194. **List III.—Italian words conveying general directions to the performer.**

Ad libitum, or *ad lib.* (*Italian and Latin*)	At the performer's pleasure as regards time.
Bis (*Italian and Latin*)	Twice. Short passages, such as a single bar or two bars, which are to be played or sung twice, have the Latin word *Bis* (*i.e.*, twice) written over or under a slur, so:— Fig. 69. 
Come	Like as; how.
Come prima	As at first [= *Wie im Anfang* (*Ger.*)].
Come sopra	As above.
Con sordini	With mutes. In *old* piano music this meant, "to release the right pedal"; in *new* piano music it *sometimes* means, "to use the *left* pedal." In **orchestral music** *mutes* are sometimes used to damp or deaden the sound of Violins, Horns, Trumpets and Trombones. When these are required in performance, the direction *Con sordini* is placed above the part so to be played; when they are to be removed the contrary direction, *Senza sordini*, is given.

Da Capo	"From the beginning." When the term "*Da Capo*" or *D.C.* occurs at any part of a piece, it signifies that the music is to be repeated from the beginning.
Da Capo al fine	From the beginning to the word *Fine.*
Da Capo al Segno	From the beginning to the sign 𝄋.
Da Capo senza repetizione	From the beginning, without repetition.
Dal Segno	From the sign 𝄋.
Fine	The end. A pause when placed over a double bar in the middle of a piece means that the piece is to end there, after a *Da Capo.* The word *Fine* is frequently used for this purpose instead of the pause :— Fig. 71.
Pedal, or *ped.* (*English*)	In **organ music** this word is used to indicate the notes to be played by the organist's feet. In **pianoforte music** it indicates that the *right* pedal is to be pressed down with the foot, and kept in that position until the ✻ (or a change of harmony) occurs, when the pedal should be raised. The words *Senza sordini* are generally understood in pianoforte music to mean "without dampers" (*i.e.*, with a free use of the right pedal); and *Con sordini* to mean "with dampers" (*i.e.*, without the right pedal). In modern music the words *Una Corda* indicate the use of the left pedal; and the words *Tre Corde* show where it should be raised. The student must not confuse the two words *mutes* and *dampers*. A mute is any contrivance for merely decreasing the average intensity of a sound; a damper is a piece of mechanism which stops the vibration of the sound-producing apparatus, and so causes actual silence.

Pizzicato—pizz.	Pluck the string (Violin).
Poco a poco, or *A poco a poco*	Little by little.
Repeat marks	Dots when written *before* a double bar indicate that the music is to be repeated from the previous double bar, or from the beginning of the piece :— Fig. 72. Dots when placed *after* a double bar indicate that the music to the following double bar is to be repeated :— Fig. 73. Repeat marks, such as the above, are used only for *long* passages intended for repetition. For short passages of a bar or so, the word *Bis* is used.
R.H.* and *L.H.	These letters indicate the use of the right hand or left hand in piano music. *Mano Destra* (*It.*) .. M.D. = R.H. *Mano Sinistra* (*It.*) .. M.S. = L.H. *Main Droite* (*Fr.*) .. M.D. = R.H. *Main Gauche* (*Fr.*) .. M.G. = L.H. are also used for the same purpose.
Segno ..	A sign 𝄋. *Al Segno* means "to the sign." *Dal Segno* "from the sign."
Simile ..	In the same manner.
Tenuto—Ten.	Held or *sustained.*
Volta	Turn; time. The signs *1ma volta* (1st time), and *2da volta* (2nd time), or simply the figures **1** and **2**, are often used in conjunction with repeats; the bar or bars marked **1** are then to be omitted at the repetition, and the bar or bars marked **2** played instead :— Fig. 74. 
Volti Subito—V.S.	Turn over quickly to the next page.

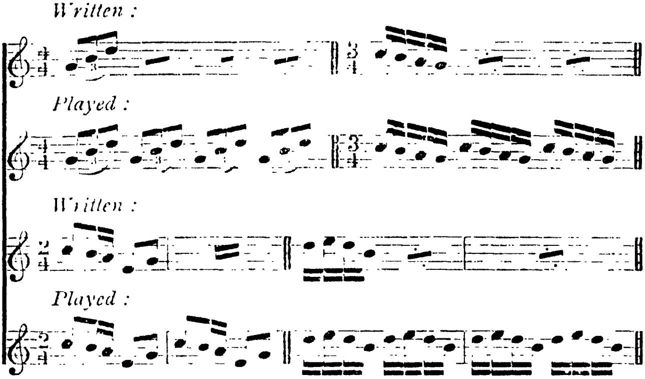
List IV.—Abbreviations.

Many of the following are used chiefly in orchestral or manuscript music.

Repetition of a bar, or of part of a bar, is indicated by the following signs : ▬, ÷, =.

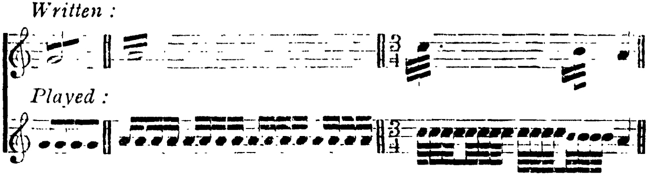
The following examples should make the working quite clear :—

Fig. 75.



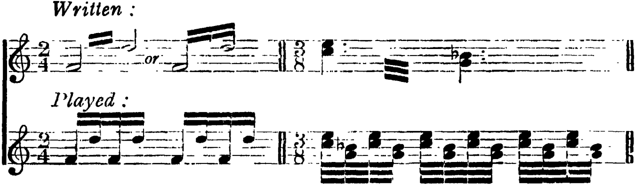
The continued repetition of a quaver or note of smaller value is shewn by writing a single note equal to the total value of all the repetitions, and putting above it, or through its stem, from one to four strokes, according to the number of tails each repeated note should have ; *i.e.*, one stroke for quaver repetitions, two for semiquavers, etc. :—

Fig. 76.



The rapid alternation of two notes (Tremolo) is indicated as follows. Note that in the abbreviated form each note is written as the *full* value of the whole passage :—

Fig. 77.



CHAPTER XI.

EMBELLISHMENTS.

195. **Embellishments** are *ornaments,* usually consisting of *small notes* (which precede), or *signs* (which are written above) some of the principal notes of a melody.

196. Embellishments were largely used in the olden times when, on account of the imperfect construction of keyboard instruments, a sustained note was weak and ineffective, unless strengthened and reinforced by ornamentation.

197. Notes are still ornamented in modern music; but in the present day composers very often write in full size the actual notes they desire to be played.

198. Up to the end of the 18th century composers did not so definitely express their intentions, hence it is sometimes difficult to know exactly what they meant by their " ornaments." Not only were the embellishments written in smaller notes than the rest, and extra to the *time* of the piece, but a large number of signs were used as well. Again, it is not always made clear, in old music, whether any given ornament is to be diatonic, or to have an accidental; whether the ornament is to be taken out of the time of the principal note, or to be played *before* that time. Nor is it invariably certain what proportion of the duration of the principal note should be assigned to the ornament, or which note should have the greater *accent,* etc.

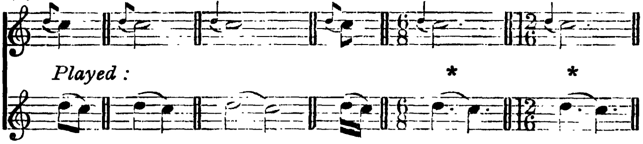
199. *It is impossible within the limits of a few pages to do more than briefly describe and explain what the chief embellishments mean. These are the **appoggiatura,** the **acciaccatura,** the **pralltriller,** the **mordent,** the **turn,** and the **shake.***

200. The **Appoggiatura** (*Ap-pód-jee-ah-tóo-rah*), lit., *leaning-note*, used to be written as a *small note* in the works of the Old Masters—Haydn, Mozart, and others of the 18th century. It is now written as a note of the usual size, and has the exact time-value given to it which it requires.

201. It takes (*a*) half the value of a note divisible by two (dotted or otherwise);
(*b*) two-thirds of a *long* note divisible by three (dotted crotchet or more);
(*c*) one-third of a *short* note divisible by three (dotted quaver or less).

Fig. 78.

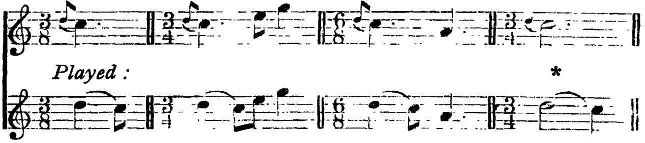
(*a*) *Written :*



* Note that here the dotted principal note is divisible by *two*, on account of the time-signature.

Fig. 79.

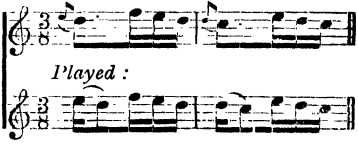
(*b*) *Written :*



* Here the dotted principal note is divisible by *three*, on account of the time-signature. Compare with the dotted-note examples at (*a*).

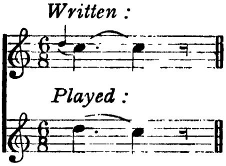
Fig. 80.

(*c*) *Written :*



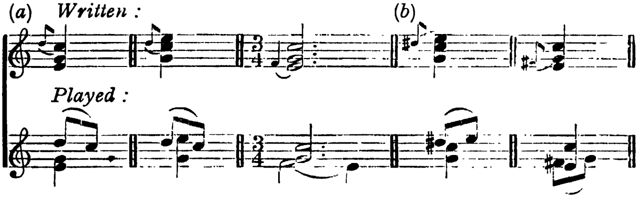
202. When written as a small note before a full-sized long note tied to a shorter one, the appoggiatura takes the value of the *whole* of the long note, and if that note has a dot, the value of **that dot also :—**

Fig. 81.



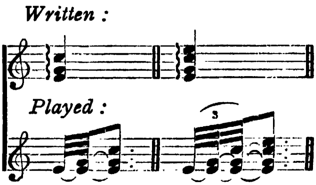
203. When attached to a chord, the appoggiatura affects *one note only*, normally that next below it (*a*). But if the appoggiatura is a chromatically raised note it will affect the note *above* it (*b*). In any case, the appoggiatura is always *one step* away from the note it displaces, *and the other notes of the chord are unaffected* :—

Fig. 82.



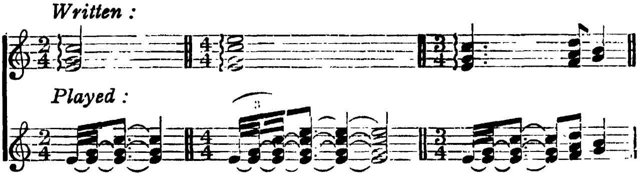
204. The **Arpeggio** begins *on* the beat, and is played from the bottom upwards. It should always be written in demisemiquavers, and each note must be tied through. The following note-values should be memorised as applying to a crotchet **chord :—**

Fig. 83.



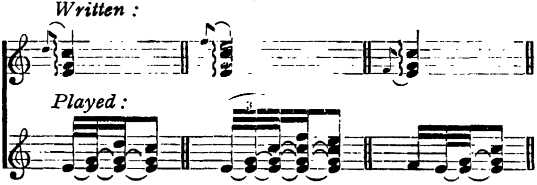
205. When the arpeggio is applied to a chord longer than a crotchet, write first the working for a crotchet chord, and tie to the remainder, taking care that grouping is correct according to the time-signature :—

Fig. 84.



206. The **Appoggiatura** and **Arpeggio** combined. The following should be memorised ; note carefully to which note the appoggiatura is attached :—

Fig. 85.



207. The **Acciaccatura** is written as a small note with a stroke through its stem. In Andante or faster write it as a demisemiquaver. Slower than Andante write it as a hemidemisemiquaver.

Memorise the workings for a quaver principal note, and for longer principal notes write whichever is appropriate to the speed and tie through for the remainder of the value, with correct grouping.

If no speed-marking is given, write as for Andante.

Fig. 86.

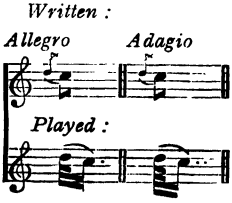
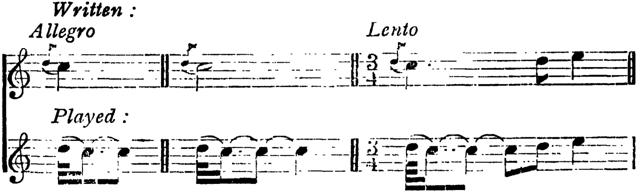
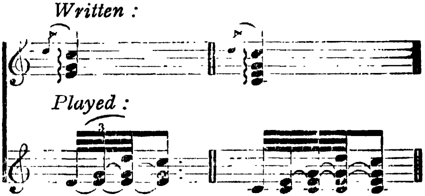


Fig. 87.



208. The **Acciaccatura** and **Arpeggio** combined. Always write in demisemiquavers, including the acciaccatura at the end of the arpeggio. Note the following workings for crotchet chords, and tie through as before for longer values :—

Fig. 88.



209. The **Upper Mordent** or **Pralltriller** (w) consists of principal note, note above, principal note. The speed of the passage must be noted :—

- (*a*) Slower than Andante write the first two notes as hemidemisemiquavers ;
- (*b*) Andante, Moderato, Allegretto, write them as demisemiquavers ;
- (*c*) Allegro or faster write them as semiquavers.

If no speed is given, write as for Andante.

Memorise the workings at (*a*), (*b*) and (*c*), applying to quaver and crotchet principal notes respectively (noting the speeds), and tie to the remainder of longer notes when necessary, noting grouping :—

Fig. 89.

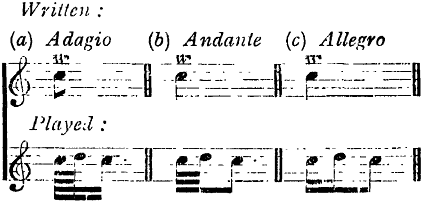
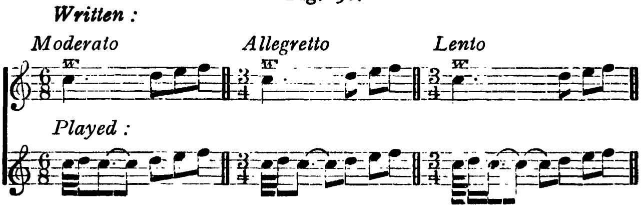
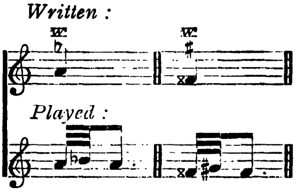


Fig. 90.



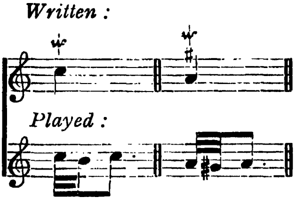
210. An accidental below the sign affects the auxiliary (upper) note :—

Fig. 91.



211. The **Lower Mordent** (w) consists of principal note, note *below*, principal note. Note values, etc., exactly as for the Upper Mordent :—

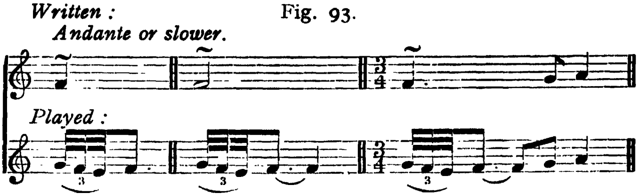
Fig. 92.



212. The **Turn** (∽) consists of upper auxiliary note, principal note, lower auxiliary note, principal note.

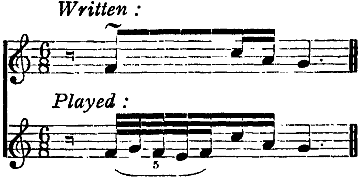
When the sign is written *over* the principal note, the turn begins where that note begins. At any speed slower than Allegretto it should be written as a triplet of demisemiquavers, followed by a longer note or notes of appropriate value. Grouping of tied notes must be watched :—

Fig. 93.



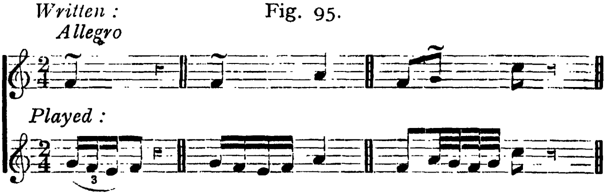
If preceded by a rest it starts on the principal note, becoming a five-note group (quintolet) :—

Fig. 94.



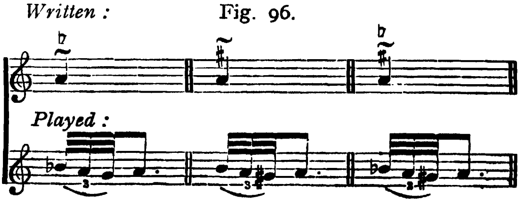
213. In Allegretto or faster the turn should be written as a group of semiquavers (unless it is over a quaver, in which case demisemiquavers are obviously essential). If over a crotchet *followed by another note* it becomes *four equal semiquavers.* But if the principal note—of whatever value—is followed by a *rest*, the triplet is essential :—

Fig. 95.



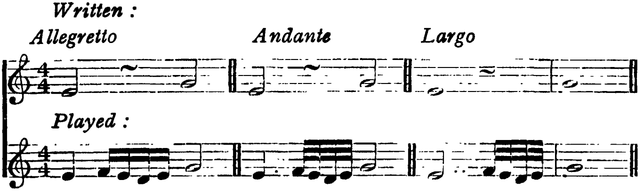
214. An accidental ***above*** the sign affects the ***upper*** **note ;** ***below*** it, the *lower* one :—

Fig. 96.



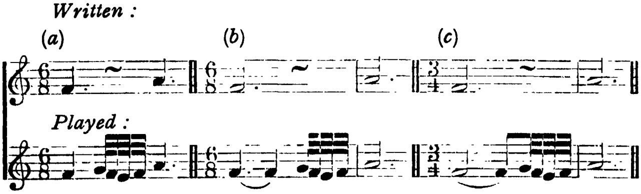
215. When the sign is written *after* the principal note, that note is held as long as possible, the turn being taken quickly at the end. At any speed faster than Andante write as four semiquavers. For Andante or slower use demisemiquavers:—

Fig. 97.



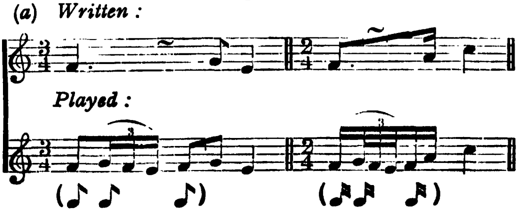
216. The same applies when the principal note is dotted, *provided it does not involve a fraction of a beat.* In the following, at (*a*) the dotted note is *one beat*; at (*b*) it is *two beats*; and at (*c*) it is *three beats* :—

Fig. 98.



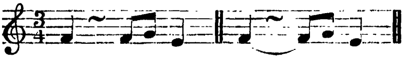
217. If the dotted principal note involves a *fraction of a beat, i.e.*, if it is worth, *e.g.*, three-quarters of a beat, or a beat and a half, the first three notes of the turn become a triplet. The dotted note divides into three parts. The first part is the principal note; the second is occupied by the first three notes of the turn (a triplet), and the last part is taken by the final note of the turn.

Fig. 99.



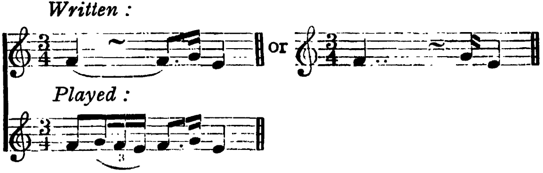
Both of the following would be played as at (*a*) in Fig. 99 :—

Fig. 100.



218. Note also the following, which is derived from the above :—

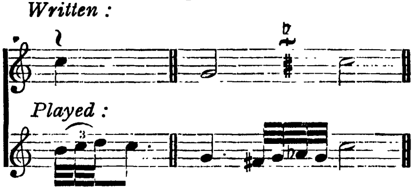
Fig. 101.



219. Accidentals affect a turn after a note in the same way as they affect a turn over a note. If no speed is indicated, use note-values as for Andante.

220. The **Inverted Turn** (∽ or ≀) proceeds in the opposite direction : Lower auxiliary note, principal note, upper auxiliary note, principal note. Note-values, accidentals, etc., as for the ordinary turn :—

Fig. 102.



221. The **Shake** or **Trill** (*tr*⁓) consists of a rapid alternation of the given note with the note *above* it. (N.B.—*Never* shake with the note below.)

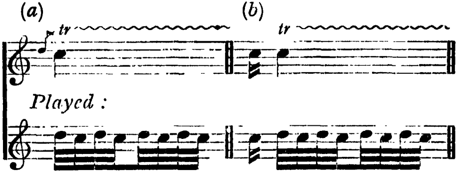
Except for high speeds (Allegro and over) write in demisemiquavers.

The shake begins on the principal note unless :—

(*a*) indicated otherwise by an Acciaccatura (which becomes the first note of the shake) ;

(*b*) the shake is preceded by its own principal note.

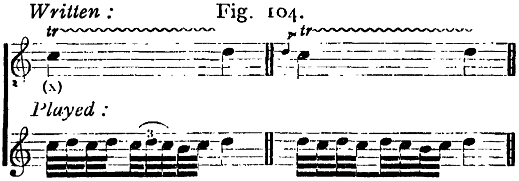
Fig. 103.



222. It is usual to end with a turn, whether indicated or not, unless :—

(*a*) indicated otherwise ;
(*b*) the shake is short and proceeds to an unaccented note.

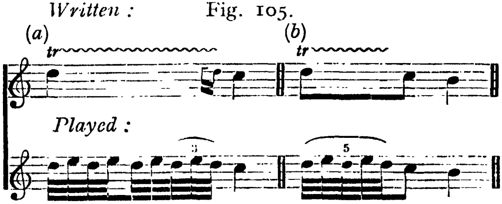
Fig. 104.



Note the necessity for the triplet at (x) ; the auxiliary note *may not be quitted by leap.*

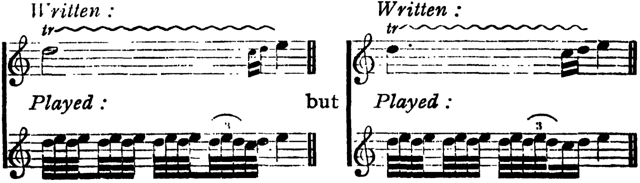
223. The exceptions mentioned in paragraph 222 :—

Fig. 105.



224. Note whether the last two notes of a final turn (if indicated) are given as *small* notes or *full-sized* ones. Small notes take the same value as the other notes of the shake, but full-sized ones must retain their printed value. Hence the following distinction :—

Fig. 106.



225. A shake over a short note resembles a turn starting on its principal note,* and if over two notes affects the *upper one only* (Fig. 107, (*a*)). Over a semiquaver the shake will be merely a demisemiquaver triplet (Fig. 107, (*b*)).

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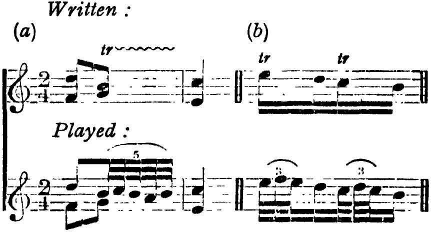
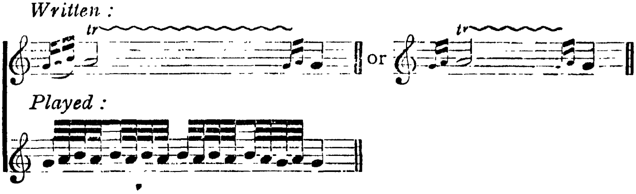
* **But note paragraph 222 (*b*).**

Fig. 107.



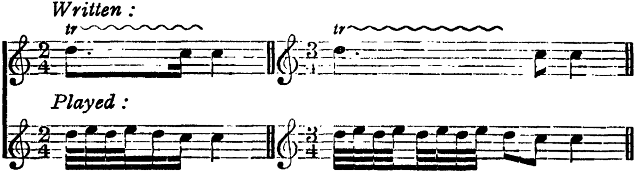
226. Small notes preceding the shake are taken into it:—

Fig. 108.



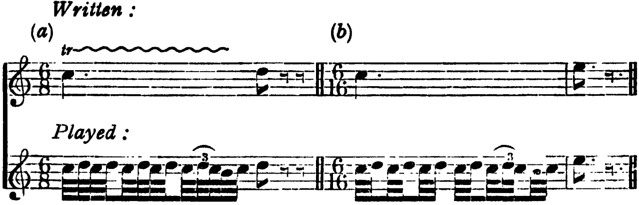
227. A shake over a dotted note which involves *a fraction of a beat, i.e.,* is worth, *e.g.,* three-quarters of a beat, or a beat and a half, ends " *on the dot.*" No turn is needed:—

Fig. 109.



But if the dotted note is worth exactly one, two, or three beats, it is treated in the same manner as an undotted note, *i.e.,* the shake continues to the end.

Fig. 110.

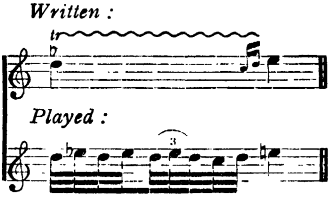


(*a*) Dotted note worth one beat.

(*b*) Dotted note worth two beats.

228. An accidental above the principal note affects the auxiliary:—

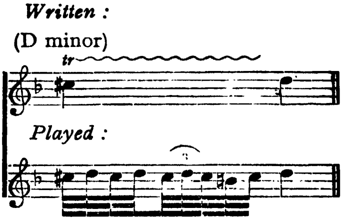
Fig. 111.



Note that the final E in the above requires a natural sign. It is *not* affected by the shake accidental.

229. Care is needed with a shake on the leading note of a minor key. The lowest note of the final turn must be accidentally raised to avoid an augmented 2nd.

Fig. 112.



230. Remember that if no speed indication is given, ornaments which are affected by speed should be written as for Andante

FINAL HINTS FOR EXAMINATIONS.

At the Examination, the Examiners will pay special attention to:—

Correct spelling.

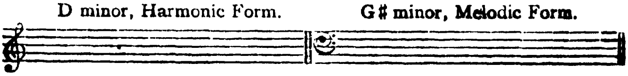
Accuracy of notation, including—

The correct position of stems with respect to the notes.
The proper order and position of sharps and flats in key-signatures.
Due insertion of necessary accidentals, ties, slurs, etc.
Proper grouping of quavers and shorter notes.
All transposed phrases must be given complete, with correct key and time-signatures.

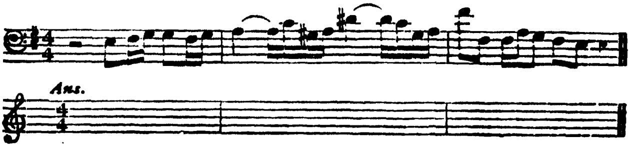
Following is a specimen paper set for the Advanced Junior Division of the Trinity College of Music Local Examinations in Theory of Music:—

ADVANCED JUNIOR DIVISION.

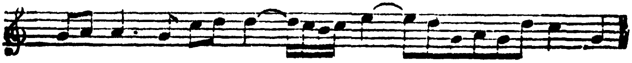
1. (10 marks.) Write, in minims, an ascending octave of each of these Minor Scales, prefixing the signature:—



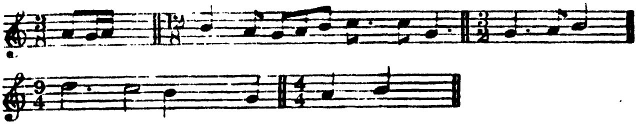
2. (15 marks.) Transpose this Melody up a Minor 6th, into the key of C minor, using the proper Key-signature:—



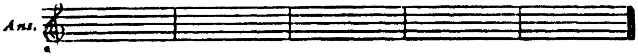
3. (10 marks.) Add the Time-signature and bar-lines to this Melody:—



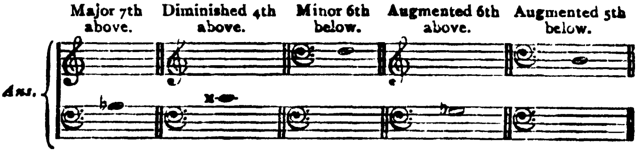
4. (15 marks.) **Complete the following bars by the addition to each of one note:—**



5. (10 marks.) On the given staff write the notes (with necessary accidentals) forming the four Major 6ths and the Diminished 5th contained in the Key of A♭ major:—

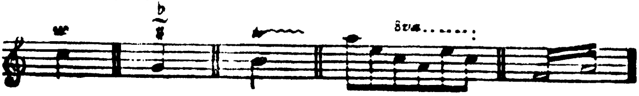


6. (15 marks.) On the given staff write the notes necessary to form the Intervals named:—



7. (10 marks.) Give the English meanings for the following Italian terms:—*Sempre più crescendo; Volti subito; Risvegliato; Pesante; Sotto voce.*

8. (15 marks.) Write out in full how each of the following should be played:—



APPENDIX.

For reference only: not required for Local Examinations in Theory of Music.

SUPPLEMENTARY LIST OF ITALIAN TERMS.

Affettuoso	With tender feeling.
Alcuna Volta	Sometimes
Allegrezza	Gaiety.
Alla Capella	In the style of unaccompanied church music.
Amabile	Amiably.
Amarevole	Bitter, sad.
Amorevole; amoroso	Lovingly.
Ancora	Again.
Appenato	Distressed, sorrowful.
Ardito	With spirit and boldness.
Arioso	A short melody.
A suo arbitrio	According to the performer's judgment.
Attacca	Go on immediately.
Barcarola	A boat-song.
Battuta	The strong beat of the bar.
Burlesco	Comic; funny.
Cadenza	A florid, ornamental passage, generally intended as a means of technical display.
Cantilena	A song-like melody.
Col arco	With the bow (stringed instruments).
Colla parte or *Colla voce*	The accompanist to keep closely with the solo part, or voice.
Con amore	Lovingly.
Desto	Sprightly.
Di bravura	In a florid style; brilliantly.
Di chiaro	Clearly.
Di grado	By degrees.
Di peso	At once.
Divisi	Divided (largely used in orchestral music).
Dopo	After.
E poi	And then.
Fresco	Fresh; vigorous.
Fin a qui	Up to this place.
Glissando	Sliding the tips of the fingers along the keys.

Gustoso	Tastefully.
Impetuoso	Impetuously.
Lagrimoso	Tearfully ; mournfully.
Lamentevole	In a plaintive manner.
Languido	Languid.
Lusingando	Coaxingly ; soothingly.
Obbligato—Obb.	Indispensable ; some part which cannot be omitted in performance.
Ostinato	Continuous ; persisted in.
Parlando ; parlante	In a speaking manner.
Questo	This.
Roccoco	Odd ; old fashioned.
Sciolto ; sciolamente	Free ; unrestrained.
Segue	"Then follows," *i.e.*, go on with what comes next.
Sino	Up to ; as far as ; until. *D.C. sin' al segno* therefore means "from the beginning as far as the sign."
Si replica	To be repeated.
Sordino	A mute (of a stringed instrument).
Spianato	Without pathos ; smooth ; even ; calm.
Strepitoso	In a loud, boisterous manner.
Sul G, D, or *A*	On the G, D, or A string of a Violin.
Sul ponticello	Play near the bridge (Violin).
Svegliato	Wide-awake ; lively.
Tacet	Be silent.
Tutti	All ; every performer is to take his part.
Vellutato	Velvety ; smooth.

WORDS AND MARKS OF EXPRESSION IN LANGUAGES OTHER THAN ITALIAN.

N.B.—*Ger.*=German ; *Fr.*=French.

List I. Concerning fixed degrees of Intensity of Tone.

Ruhig (*Ger.*)	Soft=*piano*.
Stark (*Ger.*)	Loud=*forte*.

List II. Concerning fixed degrees of Speed or Pace.

Feierlich (*Ger.*)	Extremely slow ; solemn=*grave*
Langsam (*Ger.*)	Slowly ; tardily=*largo.*
Lebhaft (*Ger.*)	Brisk ; lively=*vivace.*
Mässig (*Ger.*)	In moderate time=*moderato.*

Nicht schnell (*Ger.*)	Not quick = *allegro non troppo.*
Rasch (*Ger.*)	Quick; merry; gay *allegro.*
Schnell (*Ger.*)	Very quick *presto.*

List III. Concerning alterations or modifications of Pace.

Bewegter (*Ger.*)	Quicker = *più mosso.*
Langsamer (*Ger.*)	Slower = *più lento.*
Rascher (*Ger.*) *Schneller* (*Ger.*)	Quicker = *più mosso.*
Voriges Zeitmass (*Ger.*)	In the same time as at first *tempo primo.*
Wie zuerst (*Ger.*)	In time *a tempo.*
Zurückhaltend (*Ger.*)	Retarding or keeping back the time *rallentando.*

List IV. Words indicating Expression, etc.

A la (*Fr.*)	In the style of.
Andächtig (*Ger.*)	Devoutly.
Ausdruckvoll (*Ger.*)	With expression = *con espressione.*
Barcarolle (*Fr.*)	In the style of a boat-song.
Berceuse (*Fr.*)	In the style of a cradle-song.
Bestimmt (*Ger.*)	Decided; precise.
Bewegt (*Ger.*)	Moved; agitated.
Dreist (*Ger.*)	Bold.
Dur (*Ger.*)	Major.
Einfach (*Ger.*)	Simple; plain.
Einfalt (*Ger.*)	Simplicity.
Erhaben (*Ger.*)	Sublime; elevated.
Festiglich (*Ger.*)	Firmly.
Folâtre (*Fr.*)	Playful; lively.
Frei (*Ger.*)	Free.
Fröhlich (*Ger.*)	Joyous; cheerful.
Gefällig (*Ger.*)	Pleasing.
Gehalten (*Ger.*)	Held or sustained.
Gemüthlich (*Ger.*)	Expressive.
Gewichtig (*Ger.*)	Heavy, weighty.
Klage (*Ger.*)	Lamentation.
Kraft; Kräftig; or *Kräftlich* (*Ger.*)	In an energetic manner = *con energia*
Lebendig; Lebhaft (*Ger.*)	Lively.
Lourdement (*Fr.*)	Heavily.
Lustig (*Ger.*)	Merry; jovial.
Moll (*Ger.*)	Minor.
Sanft (*Ger.*)	Soft, *i.e.*, tender (= *teneramente*).
Scharf betont (*Ger.*)	Sharply and clearly defined.
Seele (*Ger.*)	Soul.
Sing-weise (*Ger.*)	In a singing style.
Traurig (*Ger.*)	Sad; mournful.
Triste (*Fr.*)	Sad.

Trüb (*Ger.*)	Troubled; gloomy.
Vif (*Fr.*)	Lively.
Vitement (*Fr.*)	Quickly; with life.
Wehmuth; *Wehmuthig*; *Wehmuthigkeit* (*Ger.*)	Melancholy.
Würde (*Ger.*)	Dignity.
Zartheit; *Zärtlich* (*Ger.*)	Delicately; softly.
Zierlich (*Ger.*)	Gracefully; neatly.

List V. Adjectives, Prepositions, etc., used before other words.

Auf das, or *Aufs* (*Ger.*)	On (or to) the.
Aus (*Ger.*)	From; out of; out.
Dem (*Ger.*)	To the.
Dia (*Greek*)	Through (as in *dia*tonic, *dia*pason, etc.).
Einige; *ein wenig* (*Ger.*)	Some.
Etwas (*Ger.*)	Somewhat; rather (= *un poco*).
Hohen (*Ger.*)	High; upper.
Mit (*Ger.*)	With.
Ober (*Ger.*)	Over; higher.
Oder (*Ger.*)	Or.
Ohne (*Ger.*)	Without.
Recht (*Ger.*)	Right; correct.
Sehr (*Ger.*)	Very; much; greatly (=***molto***).
Viel (*Ger.*)	Much; many.
Wenig (*Ger.*)	Little; rather.
Ziemlich (*Ger.*)	Moderately; tolerably (= ***non troppo***)

List VI. Words conveying general directions to the performer.

Allmählich (*Ger.*)	By degrees, gradual.
Immer (*Ger.*)	Always (=*sempre*).
Même (*Fr.*)	The same.
Möglich (*Ger.*)	Possible.
Nach und nach (*Ger.*)	Little by little (=*poco a poco*).
Noch (*Ger.*)	Again (=*ancora*).
Peu à peu (*Fr.*)	Little by little = *poco a poco*.
Ut supra (*Latin*)	As above.
Wieder (*Ger.*)	Again.

List VII. Names of Ornaments.

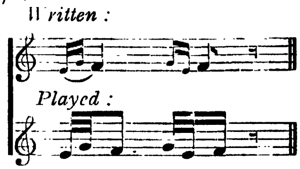
Doppelschlag (*Ger.*)	The turn (see pars. 212-220).
Nachschlag (*Ger.*)	The after-note (see Appendix **B**).
Schleifer (*Ger.*)	The slide (see Appendix B).
Triller (*Ger.*)	The shake (see pars. 221-229).
Vorschlag (*Ge*	The appoggiatura (see pars. 200-206)
Zusammenschlag (*Ger.*)	The acciaccatura (see par. 207).

APPENDIX B.

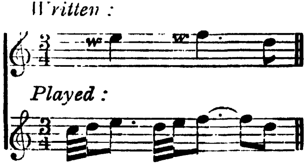
Embellishments.

The following notes on some of the rarer ornaments and their interpretation are included for completeness. **Knowledge of them is not required in the Advanced Junior Examination.**

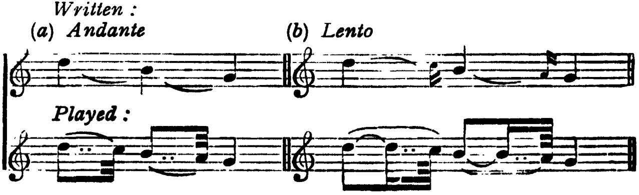
1. **The Double Appoggiatura** consists of two small notes written before a full-sized note. Note-values as for the Pralltriller (see page 72).



2. The **Slide** is indicated by the sign for the Pralltriller placed *before* the principal note. It means that this principal note is to be preceded by the two notes below it, played scalewise. These notes take their value from the principal note.
Note values as for the Pralltriller (see page 72).

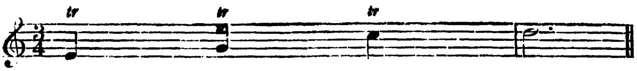


3. **The After-note** is a very short note, the duration of which is taken from the principal note which *precedes* it. It lies between two notes a third apart, and is indicated either by a small slur placed in a slanting or sideways position (*a*), or by a small note (like an appoggiatura) slurred to the *preceding* principal note (*b*). Always write as a demisemiquaver unless the speed is very slow, when a hemidemisemiquaver is appropriate.

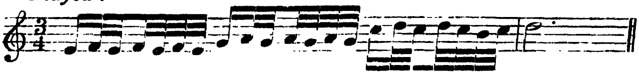


4. The **Chain of Shakes** ("**Catena di trilli**") **is** sometimes **met with, and is rendered as below. Note** that **a turn is added only to the** *last* **shake**

Written :

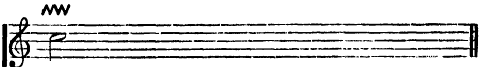


Played :



5. **Old-fashioned signs for the Shake.** The basic sign **is** ∿∿, indicating a straightforward shake starting on the note above the principal note, and ending *without* a turn. Always write as demisemiquavers.

Written :



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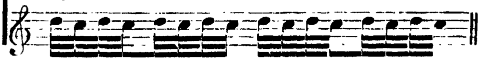
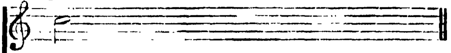


N.B.—Note the grouping of the above demisemiquavers, the two *long* tails show crotchet groups, and the shorter tails, covering four demisemiquavers each, show quaver subdivisions. This method of writing is desirable for ease in reading.

The shake beginning with a turn :—

Written :



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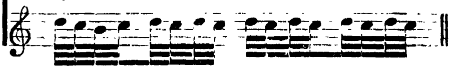
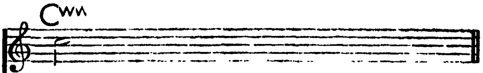


The shake beginning with an inverted turn :—

Written :



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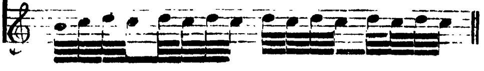
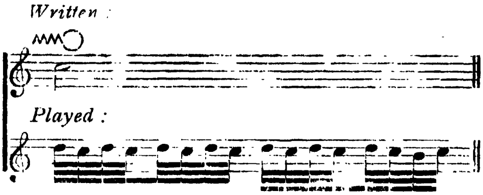
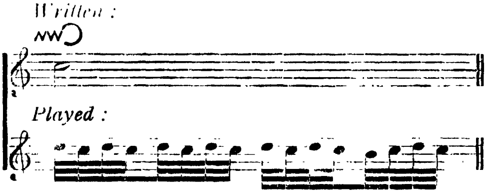


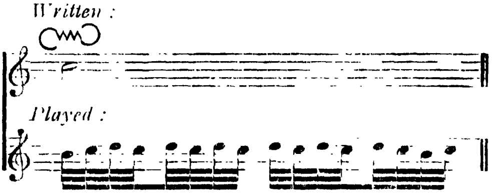
The shake ending with a turn :—



The shake ending with an inverted turn :—

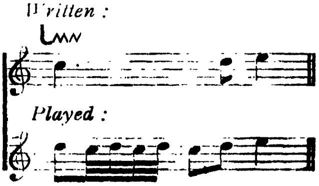


The shake beginning with an inverted turn, and ending with a direct turn :—



Note that in every case the direction of the turn follows that of the curved stroke.

The Shake preceded by an appoggiatura :—



For some particulars of the Teaching and Examination Departments of Trinity College of Music see Appendix at the end of this book.

QUESTIONS & EXERCISES.

Intended for Practical Use

DURING THE STUDY OF

The Text-Book of Musical Knowledge,

(Theory of Music),

AS A PREPARATION FOR

THE LOCAL EXAMINATIONS IN THE THEORY OF MUSIC,

INTERMEDIATE DIVISION,

OF

Trinity College of Music,

BY

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PREFACE.

This work is intended to be a companion to the *Intermediate Division Text-Book* of Musical Knowledge, issued by Trinity College of Music for the preparation of Candidates for the Intermediate Division of the College Local Examinations in the Theory of Music.

The number of every *question* will be found to correspond exactly with the number of the *paragraph* in the *Intermediate Text-Book*, which contains the answer to the question set. The two books (if used together) thus present the necessary instruction in the form of a **Catechism**—with this advantage over ordinary books of that kind, viz., that questions and answers are not given together on the same page of the same book. The Exercises are arranged in **Groups**, and many of them are actual tests taken from past Examination papers set for Candidates in the Intermediate Division.

Every facility should be given to the student for training his ear as well as his eye; consequently, every exercise should be played upon the pianoforte after it has been worked.

The following should be the method of using this book:—

After a chapter in the Text-Book has been carefully studied, the pupil should answer all the questions set upon that chapter in the present book. When this task has been satisfactorily accomplished, he should work out the exercises belonging to the same chapter, which he will find printed at the end of this book. Many of these exercises are extracts from the works of Classical and Standard English Composers; so that much of the usual dry, uninteresting, and monotonous character of this kind of study has been here avoided. It is suggested that when this book is used in class, the numerous extracts from Beethoven's Sonatas should be played by the teacher, so as to give the pupils an opportunity of **hearing** the use of harmony, both plain and ornamented, in order that they may gain facility in aurally recognizing the various melodic and harmonic progressions without visually seeing them. No better examples, nor more comprehensive ones, could possibly be given for this purpose. For, writes **Professor Niecks,** "Beethoven's Sonatas are a world; nay, an immense company of many worlds, each of which has its peculiar conformation, chemical constitution, and spiritual character."

Students who are not Examination Candidates must work through the Companion Question Books to the Trinity College Text-Books of Musical Knowledge (*Preparatory and Junior Divisions*), before they can be qualified to use the present work.

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QUESTIONS.—INTERMEDIATE DIVISIONS.

CHAPTER I.

STAVES, CLEFS, SCORE, AND PARTS.

1. What is a "tone"?

2. How does a tone appeal to the "ear"?

3. How are tones expressed in "musical notation"?

4. In what way can a "note" have a "definite pitch" assigned to it?

5. What is the "Great Staff"?

6. Explain what is meant by "Pianoforte (or Short) Score."

7. What is the use of a "Clef"?

8. How many clefs are there?

9. What clef is placed on the 4th line of the "Great Staff"?

10. Upon what line of the Great Staff is the "Treble clef" placed?

11. What clef is always written upon the line called "Middle C"?

12. Explain the necessity for using the "C clef."

13. Name the four voices in a "choir."

14. Give the average highest and lowest notes which can be sung by each of the "four voices." Explain the difference between "Treble" and "Soprano," "Alto" and "Contralto."

15. What is a "Vocal (or Open) Score"?

16. Explain what is meant by the term "part."

17. What are the "relative places" of parts in a score?

18. Which are the "extreme" and "inner" parts?

19. Explain what is meant by "crossing" the parts

20. What is "overlapping" of the parts?

21. State what is the disadvantage or danger in crossing or overlapping the parts.

22. What three facts have to be borne in mind when reading from the C clef?

23. Describe the difference between the "Tenor staff" and the "Alto staff."

24. Describe the "Soprano" and "Mezzo-Soprano" clefs. What clefs are used when writing for a String Quartet?

CHAPTER II.

INTERVALS OF ALL KINDS: DIRECT AND INVERTED.

25. What is an "Interval"? and upon what do its "numerical" and "qualifying" names depend?

26. What is the "smallest interval" which can be played on the pianoforte?

27. Distinguish between a "Chromatic semitone" and a "Diatonic semitone."

28. What two *kinds* of interval are to be found between any key-note and the other degrees of its major scale?

29. Give a list of *perfect*, *major*, *minor*, *augmented*, and *diminished* intervals.

30. In what "two classes" may all intervals be placed?

31. Explain the difference which the ear perceives between "concords" and "discords."

32. State which intervals are "perfect concords" and which are "imperfect concords."

33. What intervals are "discords"?

34. How is an interval "inverted"?

35. Give a rule for quickly finding the "inversion" of an interval.

36. Give a list of the "mental effects" which the various degrees of the major scale have upon the ear.

37. Which degrees of the Harmonic minor scale have different "mental effects" from those produced by the corresponding degrees of the major scale? Describe them.

38. Describe the difference between a "simple interval" and a "compound interval."

39. Give a list of "compound intervals."

40. From what interval is an "augmented octave" obtained?

41. Explain how a "doubly-augmented octave" can be formed.

42. State how a 9th is distinguished from a "compound 2nd," and show which of the two notes of a 9th and of a 2nd is "the discord."

43. What are "compound 4ths and 6ths" sometimes called?

CHAPTER III.

TRIADS, AND TERMS USED IN HARMONY IN CONNECTION THEREWITH.

44. Define the term "chord."

45. Explain what is meant by (i.) the "Bass-note" of a chord, (ii.) the "intervals of a chord."

46. How are the intervals of a chord "reckoned"?

47. Explain the difference between a "consonant chord' and a "dissonant chord."

48. What is a "triad"?

49. What is the "root of a triad"?

50. Which of the three notes of a triad is the best one to "double"?

51. What makes a triad "consonant" or "dissonant"?

52. How is a "consonant triad" formed? Give another name for it.

53. What makes a common chord "major" or "minor"?

54. What is a "dissonant triad"?

55. Describe the construction of an "augmented triad."

56. Of what intervals from the root does a "diminished triad" consist?

57. Why is a dissonant triad "restricted and dependent" in its progression?

58. Explain what is meant by "resolution."

59. How is the 5th in an "augmented triad" resolved?

60. Describe the resolution of the 5th of a "diminished triad."

61. What is meant by the "different positions" of a triad?

62. After the root, what is the "next best note" to double in a common chord?

63. In minor and in dissonant triads, which is the "best note" to double?

64. Which note of the scale must "never be doubled" when it occurs in a common chord?

65. Explain what is meant by writing a chord in "close harmony."

66. What is meant by "extended harmony"? and why is this convenient for "vocal exercises"?

67. What is "full harmony"? What has specially to be remembered when chords are written thus?

68. What is an "arpeggio"?

69. What is a "bye-tone"?

70. Explain what is meant by "figured Bass." Mention other names by which this is known.

71. What is "Tasto Solo"?

CHAPTER IV.

THE TONAL RELATIONSHIP OF TRIADS.

72. Of the seven triads belonging to any major scale, which are (i.) "primary," (ii.) "secondary," (iii.) "dissonant"?

73. How are the three kinds of triads distinguished one from another for "purposes of analysis"?

74. Describe the "order" in which the three primary triads are often met with at the end of a piece of music.

75. Show how the three *primary* triads are "related" to one another.

76. Explain how the three *secondary* triads are "related" to the three primary triads, and also to one another.

77. How should secondary triads be used, so as "not to disturb the key"?

78. Show how the dissonant triad (vii^0) is related to the secondary triads.

79. Which of the three primary triads of the minor key is "always major"?

80. Upon which degree of the minor scale do you find the "one secondary triad"?

81. How and why are dissonant triads sometimes "chromatically altered"? Show how these alterations may be "radically indicated" for purposes of analysis.

82. How is the dominant triad of a minor key sometimes "chromatically altered"?

83. Show how the triads of a *major key* can be chromatically altered.

84. State which triads sometimes undergo "enharmonic alteration."

85. Of how many tones does a "key" consist?

86. How is a key "established or defined"?

87. Which chromatic triads are most often used?

88. How should chromatic triads be used, so as "not to disturb the key"?

89. How are chromatic triads usually preceded and followed?

90. State which triads are best with their "roots" doubled, and which are best with their "thirds" doubled.

CHAPTER V.

PART-WRITING, AND TERMS USED IN HARMONY IN CONNECTION THEREWITH.

91. What are the "three dimensions of music"?

92. Of how many bars does a "musical sentence" consist?

93. What is "half a sentence" called?

94. By what names are the two "halves" of a sentence distinguished?

95. What is a *quarter* of a sentence called?

96. Explain what is meant by "melodic progression."

97. What is a "step"?

98. What is a "skip" or "leap"? Is the augmented 2nd a "skip" or a "step"?

99. What are the "harsh melodic intervals"?

100. Explain the difference between the "melodic use" of augmented and diminished intervals.

101. Explain the difference between a "chord" and a "part."

102. From what "three-fold aspect" must harmony be regarded?

103. Describe the three "motions of parts" and the use made of them in harmony.

104 Explain what is meant by "singing or playing in unison."

105. What are "consecutive octaves"?

106. When are octaves *not* "consecutive"?

107. What are "consecutive fifths"?

108. When are fifths *not* "consecutive"?

109. Describe the effect upon the ear of consecutive fifths.

110. What are "unequal consecutive fifths"? When are these *not* allowed?

111. What are "exposed octaves and fifths"?

112. Why is it bad for two parts to approach "a unison by similar motion"?

113. Explain what is meant by "False Relation."

114. State when false relation can be used without producing a bad effect.

CHAPTER VI.

CADENCES FORMED BY TRIADS IN ROOT-POSITION.

115. What is the name given to the "simplest form of horizontal harmonic progression"?

116. State the use of a "Cadence" in a musical sentence.

117. How is a cadence formed?

118. Give a list of cadences which consist of "triads in root-position."

119. Describe the construction of the "Perfect cadence." Give another name for it.

120. Mention some of the "things to be remembered when writing a perfect cadence."

121. How is a "Chord of the Dominant 7th" constructed?

122. Show how the dominant 7th chord is "figured," and how it is "indicated" for purposes of analysis.

123. Describe the manner in which the chord of the dominant 7th "improves" the interest of the perfect cadence (i.) from the "perpendicular" aspect, (ii.) from the "horizontal" aspect.

124. Of what two chords does the "Plagal cadence" consist?

125. Mention some of the ways in which a plagal cadence may be "varied."

126. What have you to remember when writing a plagal cadence?

127. Of what chords does the "Imperfect cadence" consist? Give another name for it.

128. What have you to remember when writing an imperfect cadence?

129. Describe the construction of the "Mixed cadence." and say where it generally occurs in a musical sentence.

130. Give a list of "things to remember" when writing a mixed cadence.

131. How do you form an "Interrupted cadence"? Why is this name given to it?

132. Mention some of the "things to be remembered" when writing an interrupted cadence.

133. Mention two other cadences in which chords *not* in root-position are used.

CHAPTER VII.

INVERSIONS OF TRIADS.

134. When is a chord said to be "direct"? Give another name for it.

135. When is a chord said to be "inverted"?

136. How many inversions can a "direct chord" have?

137. How many inversions has a "triad"?

138. Does the same inversion of a chord always have the "same top-part"?

139. Describe the "effect upon the ear" produced by a direct triad, and by each of its inversions.

140. How are inversions indicated in "analysis"?

141. How are inversions indicated in "figured Bass"?

142. Why in figured Bass is a direct triad left "unfigured"? State when it requires "figuring."

143. When an "accidental" is needed in figured Bass, how is it marked?

144. What is the meaning of an accidental standing *alone* under a Bass-note?

145. Sometimes in figured Bass you see a "figure with a stroke through it"—what does this mean?

146. Explain the meaning of a "line of continuation," as used in figured Bass.

147. Give a rule for finding the "root" of a triad.

148. State what are the *best* notes to double in first inversions of (i.) primary triads, (ii.) secondary triads, (iii.) dissonant triads.

149. In "successions of first inversions," where is it best to write the 6ths to the Bass?

150. Describe the construction of the "Phrygian cadence." Can it be used in the major key?

151. Which diatonic first inversions are most frequently used?

152. Describe the chord known as the "Neapolitan 6th," and state where, in a sentence, it is most frequently found.

153. Which diatonic second inversions are most frequently used?

154. State which two second inversions are "rarely used in succession."

155. Describe the different manner in which the second inversion of the Dominant is used, as compared with the second inversions of the Tonic and Sub-dominant.

156. Explain the difference between a "passing $^{6}_{4}$" and a "cadential $^{6}_{4}$."

157. Show how the Bass-note of a $^{6}_{4}$ chord may *not* be "approached."

158. Describe two ways in which the Bass-note of a $^{6}_{4}$ may be "quitted."

CHAPTER VIII.

THE CHORD OF THE DOMINANT 7TH AND ITS INVERSIONS.

159. The chord of the dominant 7th is a "combination of two triads." Name them. State also what is the "characteristic interval" of this chord.

160. Describe the "constitution" of the dominant 7th.

161. Compare the "effect upon the ear" which is produced by (i.) a dominant 7th, (ii.) a dominant triad.

162. What is "resolution"?

163. Mention six "things to be remembered" when you resolve the dominant 7th upon the tonic chord.

164. Show how the dominant 7th can be resolved upon the "sub-mediant triad."

165. Describe how the dominant 7th can be resolved by the discord "remaining stationary." State what has specially to be borne in mind when this is done.

166. How many "inversions" has a dominant 7th chord?

167. Compare the "figuring" and "indications" of the dominant 7th and its inversions with those of the dominant *triad* and its inversions.

168. Explain the meaning of the "indication" V^7c.

169. Describe the various "effects upon the ear" when listening to the dominant 7th and its inversions.

170. Show what "figures have to be omitted" when the dominant 7th and its inversions are indicated in figured Bass.

171. Show how you can discover the root and the discord when looking at the "full figuring" of the dominant 7th and its inversions.

172. Which inversion of the dominant 7th can "never be resolved" upon an uninverted tonic chord?

173. Mention the inversion of the dominant 7th in which unequal consecutive 5ths may be used with good effect. How does the discord "exceptionally proceed" in this case?

174. What bad effect has to be "carefully avoided" when the inversions of the dominant 7th are resolved upon other than tonic harmony?

175. Explain how the third inversion of the dominant 7th may be "exceptionally resolved" out of its own key.

176. Explain what is meant by "Deferred resolution.

177. May the discord be "transferred" from the Bass to a higher part?

178. In "three-part harmony," what notes may be conveniently omitted from the dominant 7th and its inversions?

179. What are "secondary 7ths," and how are they "indicated" in analysis?

CHAPTER IX.

MODULATION.

180. Define the term "modulation."

181. Explain how a key is changed (i.) to the *eye*, (ii.) to the *ear*.

182. What is "natural" modulation? Give a list of the five "attendant" or "related" keys to E♭ major and B minor.

183. How can modulation be affected to any attendant key?

184. What is a "chromatic" note?

185. Make a list of all the instructions for figuring a Bass which have been given in previous chapters of this *Intermediate Text-Book.*

EXERCISES.—INTERMEDIATE DIVISION.

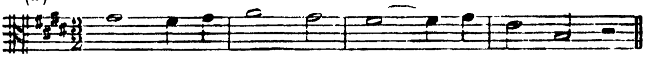
CHAPTER I.

THE USE OF THE C CLEF—TRANSPOSITION AND SCORING OF GIVEN MELODIES.

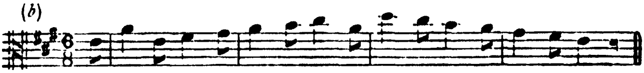
Group A. Alto to Treble.

1. Write these melodies in the Treble clef :—

(*a*)



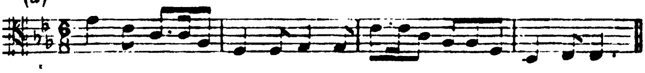
(*b*)



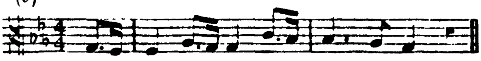
Group B. Alto to Bass.

2. Write these melodies in the Bass clef :—

(*a*)



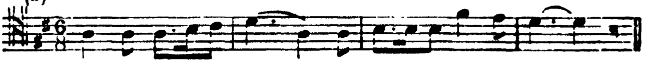
(*b*)



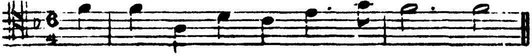
Group C. Tenor to Treble.

3. Write these melodies in the Treble clef :—

(*a*)



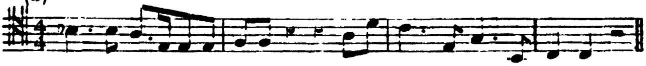
(*b*)



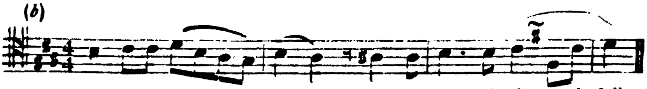
Group D. Tenor to Bass.

4. Write these melodies in the Bass clef :—

(*a*)



(*b*)

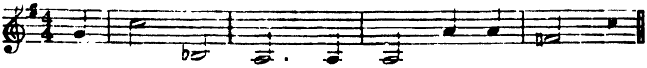


Write the turn in full.

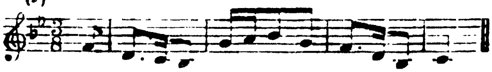
Group E. Treble to Alto.

5. Write these melodies in the Alto clef :—

(*a*)



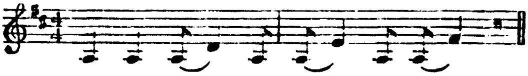
(*b*)



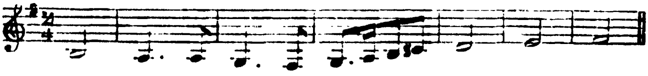
Group F. Treble to Tenor.

6. Write these melodies in the Tenor clef :—

(*a*)



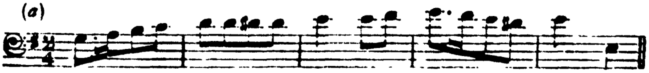
(*b*)



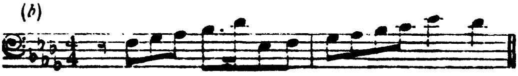
Group G. Bass to Alto.

7. Write these melodies in the Alto clef :—

(*a*)



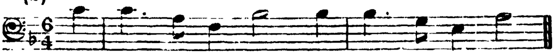
(*b*)



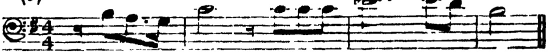
Group H. Bass to Tenor.

8. Write these melodies in the Tenor clef :—

(a)



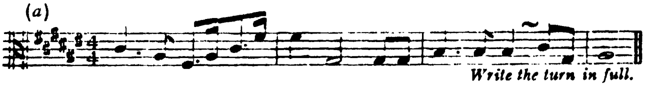
(b)



Group I. Alto to Tenor.

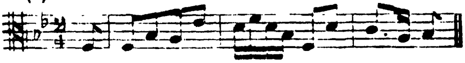
9. Write these melodies in the Tenor clef :—

(a)



Write the turn in full.

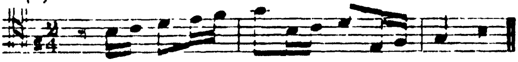
(b)



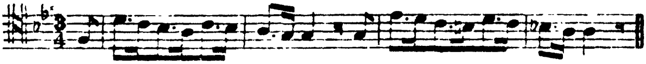
Group J. Tenor to Alto.

10. Write these melodies in the Alto clef :—

(a)



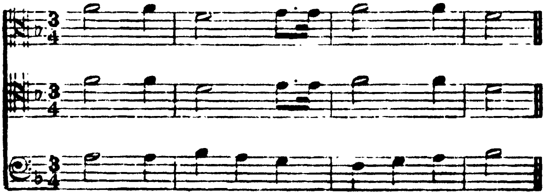
(b)



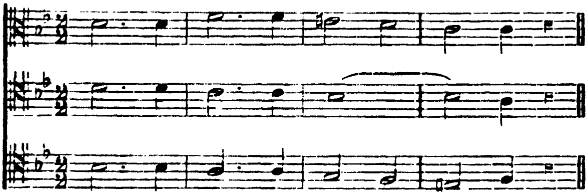
Group K. From Three-part Open Score to Piano Score.

11. Arrange these passages in Short Score for the pianoforte :—

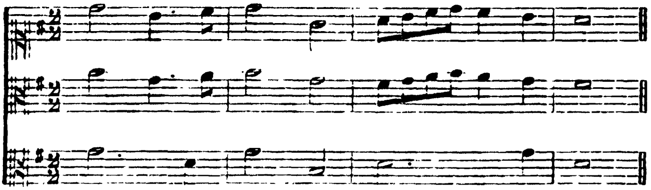
(a)



(b)

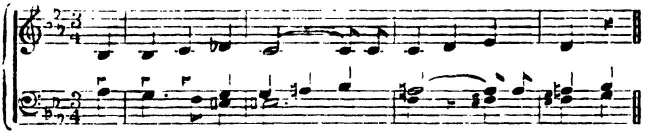


(c)

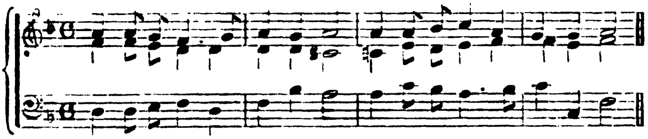


Group L. From Three-part Piano Score to Open Score.

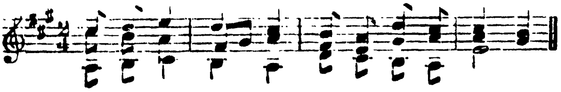
12. Transcribe this phrase into Open Score, writing it for Alto, Tenor, and Bass, using proper clefs :—



13. Transcribe the following phrase into Open Score, writing it for Alto and 1st and 2nd Tenors, using proper C clefs :—



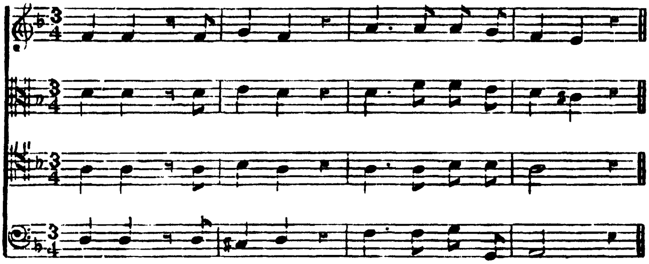
14. Transcribe the following phrase into Open Score (writing the whole of it *an octave lower in pitch*) for Alto, Tenor, and Bass voices, using the proper C clefs for the two upper parts :—



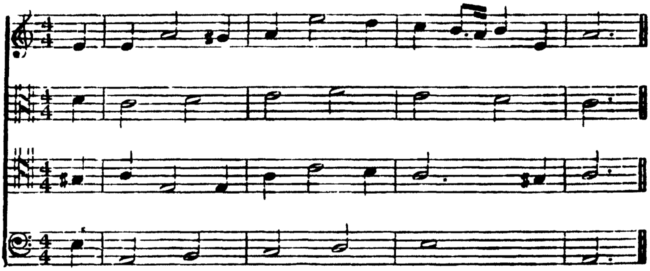
Group M. From Four-part Open Score to Piano Score.

15. Arrange the following phrases for the pianoforte in Short Score, transposing them as directed :—

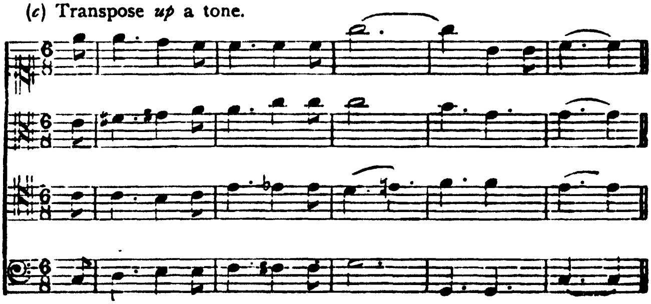
(*a*) Write this in E minor.



(*b*) Transpose this *down* a tone.

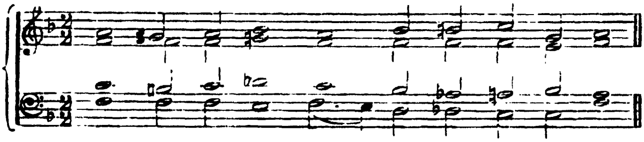


(*c*) Transpose *up* a tone.

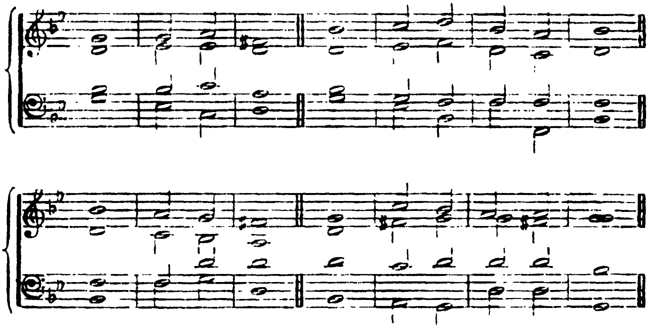


Group N. From Four-part Piano Score to Open Score.

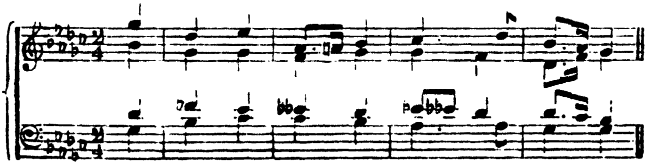
16. Transpose this Single Chant into the key of E major. Write it in Open Score, with C clefs for Alto and Tenor parts, and add the bar-lines :—



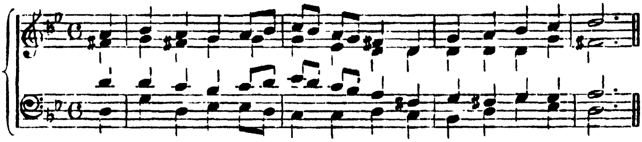
17. Transpose this a tone higher. Write in Open Score, with C clefs for inner parts :—



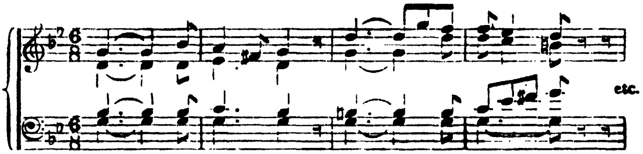
18. Transpose this portion of a Vocal Quartet down a semitone, into the key of F, writing it in Open Score, with proper C clefs for the inside parts :—



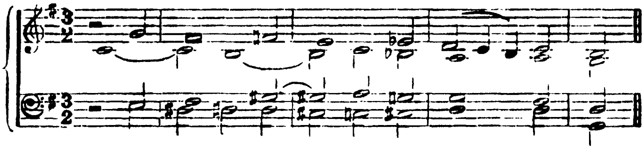
19. Transpose this into the key of F minor, writing it in Vocal Score with C clefs (Alto and Tenor) for the inner parts :—



20. Transpose this into the key of F minor, writing it for String Quartet, and using the proper clefs :—



21. Transpose this up a semitone, into the key of A flat major, writing it for String Quartet, using the proper clefs :—

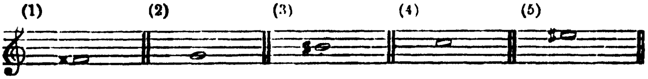


CHAPTER II.

INTERVALS DIATONIC AND CHROMATIC, SIMPLE AND COMPOUND, DIRECT AND INVERTED—ENHARMONIC EQUIVALENTS.

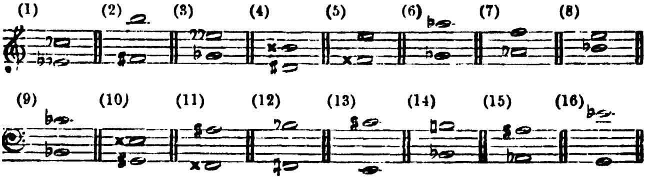
Group A. Diatonic and Chromatic Semitones.

22. *Before* each of these notes write a semibreve a diatonic semitone above it ; and *after* each write another semibreve a chromatic semitone below it, using such accidentals as are necessary :—



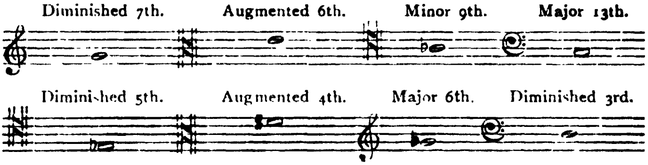
Group B. To name given Intervals.

23. Name these intervals :—

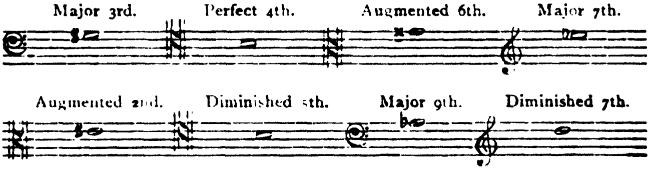


Group C. To write specified Intervals above or below given notes.

24. *Above* these given notes write as semibreves the intervals specified. *Below* the given notes write as crotchets the inversions of these intervals, and name them.



25. *Below* these given notes write as semibreves the intervals specified ; and *above* them, as crotchets, write the inversions of these intervals, and name them :—



Group D. To write specified Intervals on given Scale-degrees.

26. Write, as semibreves, the following intervals in the Treble clef, prefixing the proper key-signature to each :—(*a*) Minor 9th on the dominant of G flat major ; (*b*) augmented 5th on the mediant of B flat minor ; (*c*) diminished 7th on the leading-note of F sharp major

27. Write, as crotchets, using the Bass clef, the following intervals, with proper key-signatures :—(*a*) Augmented 4th on the sub-dominant of C sharp minor; (*b*) minor 9th on the super-tonic of D flat major; (*c*) diminished 4th on the leading-note of E flat minor.

28. Write the minor 6ths belonging to the scale of F sharp major. Write also, as minims, the following intervals :—

(*a*) Augmented 4th on sub-mediant of **C** minor.
(*b*) Major 6th on super-tonic of G sharp minor.
(*c*) Minor 7th on sub-dominant of G flat major.
(*d*) Diminished 4th on leading-note of E major.

Group E. Enharmonic Equivalents.

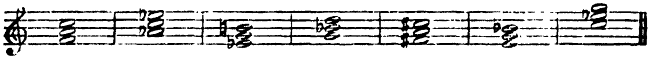
29. Write the intervals which are respectively the "enharmonic equivalents" of (*a*) diminished 5th above E; (*b*) a diminished 4th above B; (*c*) an augmented 6th above F; (*d*) a diminished 7th above C; (*e*) an augmented 2nd above D; (*f*) a major 6th above G; and (*g*) a minor 7th above A.

CHAPTER III.

TRIADS, ARPEGGIOS, BYE-TONES, FIGURING OF TRIADS.

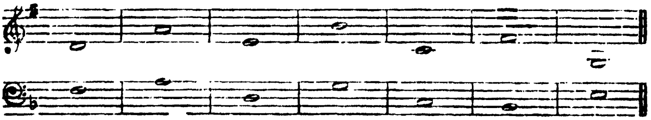
Group A. To specify given Triads.

30. State which of the following Triads are major, minor, augmented, or diminished :—

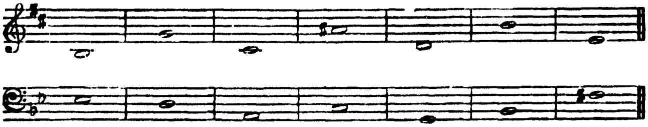


Group B. To write Triads above given Scale-degrees.

31. Write triads above each of the given degrees in these major keys, and state which triads are major, minor, or diminished. Each triad to consist of three notes only, in close position :—

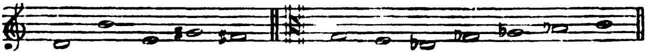


32. **Write triads above each of the given degrees in these minor keys, and state which are major, minor, augmented, or diminished. Each triad to consist of three notes only, in close position :—**

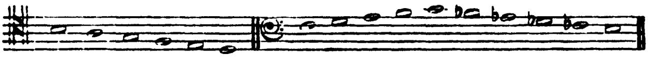


Over each of these notes write :—

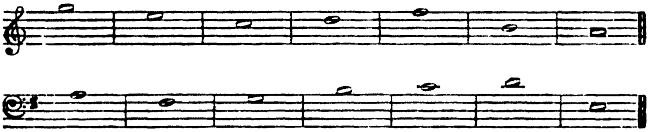
33. A ***major*** triad. 34. A *minor* triad.



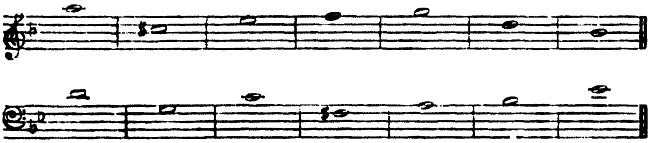
35. A *diminished* triad. 36. An *augmented* triad.



37. Write triads **below** each of the given degrees in these major keys, and state which are major, minor, or diminished :—

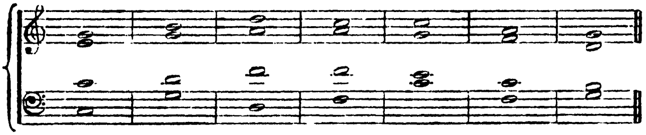


38. Write triads **below** each of the given degrees in these minor keys, and state which are major, minor, diminished, or augmented :—



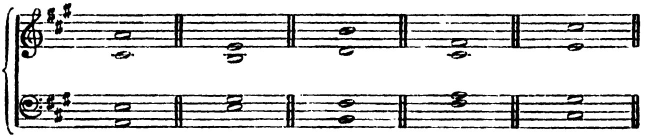
Group C. To specify Triad positions.

39. State in what position each of the following triads is written :—



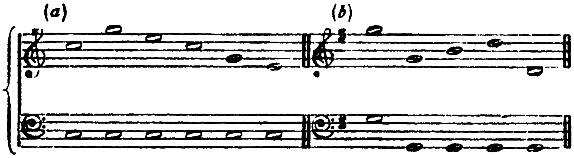
Group D. To write specified positions of Triads.

40. Give three different positions of the following chords :—

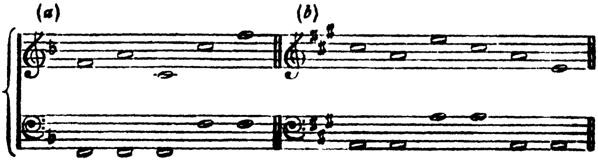


Group E. To complete Triads only partially given.

41. Complete the following triads by adding two parts, making *close* harmony : three notes for right hand, one note for left hand :—



42. Complete the following triads by adding two parts, making extended or *vocal* harmony, having two notes on each staff :—



Group F. Full Harmony.

43. Fill up the chords given in Exercise 42 in *full harmony* for pianoforte, giving as many notes as possible to each hand.

Group G. Practical Analysis.

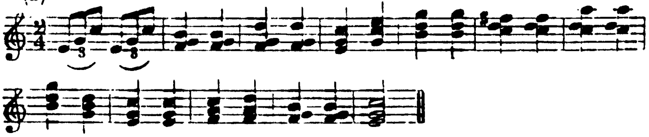
44. Copy the following extracts from **Beethoven's Sonatas.** The number of each Sonata is indicated by a large Roman numeral ; the number of each movement by a small Roman numeral ; the bar numbers are indicated by ordinary figures. In counting the bars, reckon the first *complete* bar of the movement as "one." Simplify every arpeggio figure by writing it as an ordinary chord :—

I., iv., 22–34 ; III., i., 89–110 ; III., iii., the whole or any portion of the *Trio* ; IV., iii., the whole or any portion of the *Trio* ; VIII., i., 79–90 ; IX., iii., 47–80 ; X., ii., 68–88.

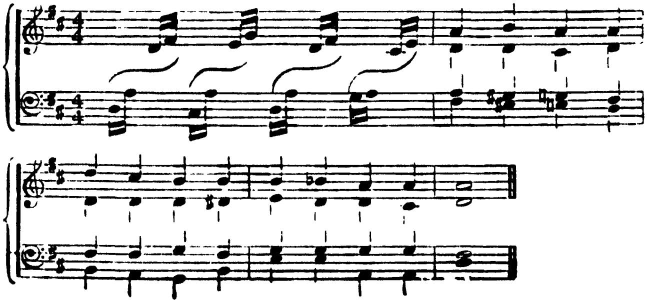
Group H. Arpeggio construction.

45. Construct arpeggio figures on the following chords, taking as your model the *form* of the arpeggio figure in the first bar of each Exercise. The final chords need not be written in arpeggio form :—

(*a*)

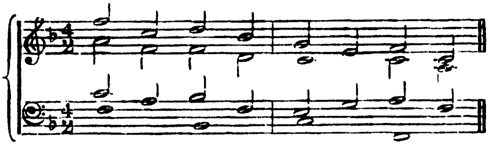


(*b*)

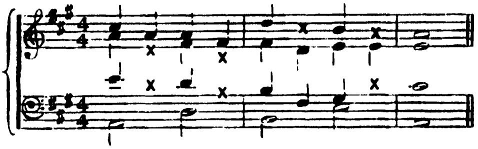


Group I. The recognition and introduction of Bye-tones.

46. Mark every bye-tone with a capital B in this Exercise :—

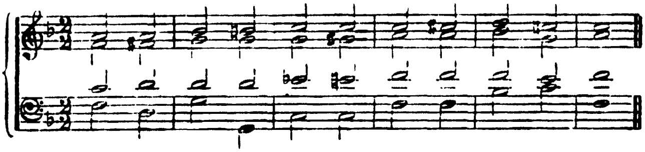


47. Put in a " bye-tone " at every place marked x :—



Group J. Figuring the Bass of a given example.

48. Figure the Bass of this passage :—

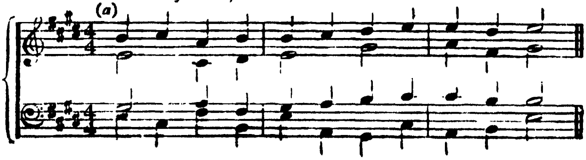


CHAPTER IV.

RECOGNITION AND INDICATION OF TRIADS BELONGING TO MAJOR, MINOR, AND CHROMATIC SCALES.

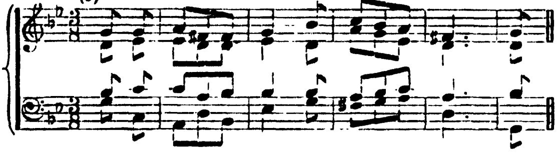
49. Give the radical indication of each chord in these phrases :—

Triads in a major key.



Triads in a minor key.

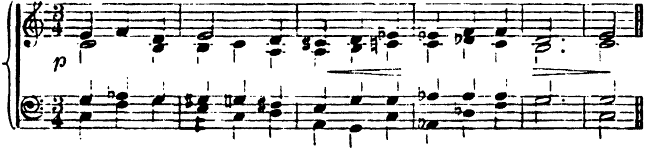
(b)



50. Write out a complete table of dissonant triads in the major and minor keys of D and E, giving the "radical indication" of each triad, and the "figuring" where necessary.

51. Give the figuring (where necessary) and the radical indication of each chord in this phrase :—

(a)



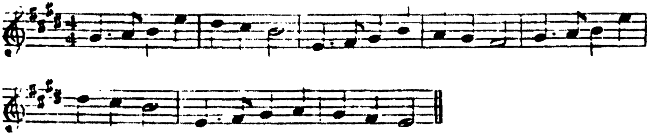
CHAPTER V.

ANALYSIS OF SIMPLE SENTENCES—DETECTION OF CONSECUTIVES.

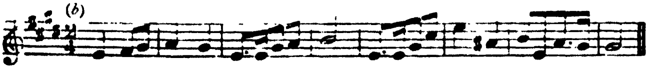
Group A. Analysis of Sentences.

52. In each of the following sentences mark the sections by slurs, and place a double bar between the two phrases :—

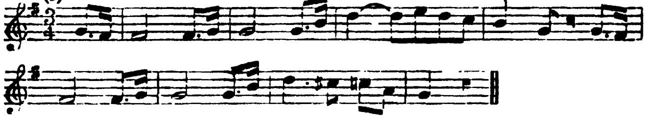
(a)



(b)



(c)



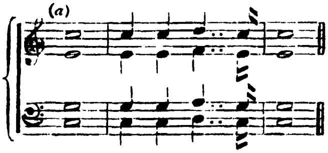
(*d*) Do the same with the following melodies selected from **Beethoven's Sonatas.** Copy the *melody only.*

I., ii., bars 1 to 8; II., ii., 1 to 8; III., i., 1 to 8; IV., ii., 1 to 8; IV., iv., 1 to 8; XII., ii. (*Trio*), 1 to 8; XII., iii., 1 to 8; XIII., *Finale*, 1 to 8.

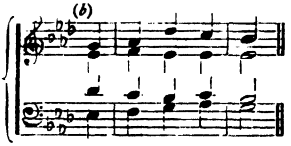
Group B. Detection of Direct Consecutives.

53. Copy out in Full Vocal Score, with the proper clef for each inner part, the following phrases. Mark any consecutive 8ves and 5ths you may discover, by drawing parallel lines from note to note, and indicating the incorrect progressions by the figures 8—8 or 5—5. Add the time-signature to each example:—

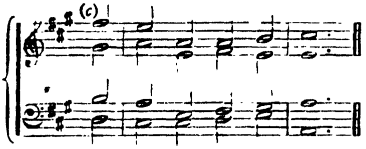
(a)



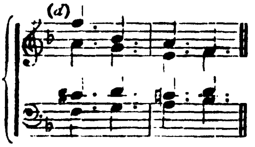
(b)



(c)



(d)

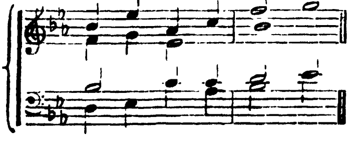


Play these Exercises on the pianoforte, and let your ear (as well as your eye) detect the consecutives.

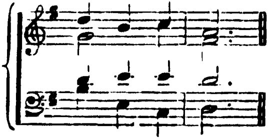
Group C. Detection of Indirect Consecutives.

54. Copy out these phrases in Open Score, and mark with parallel lines any "exposed" 8ves or 5ths, or badly approached unisons which you may discover:—

(*a*) For Strings.



(*b*) For Voices.



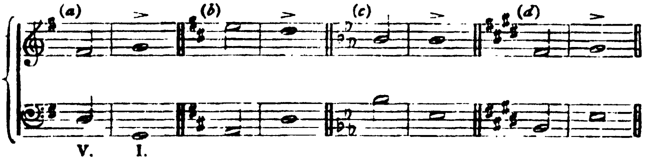
CHAPTER VI.

CADENCES: PERFECT, PLAGAL, IMPERFECT, INTERRUPTED, MIXED.

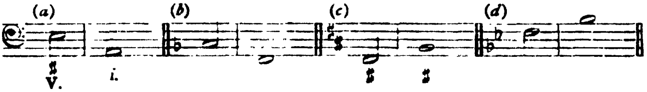
Students are strongly recommended to *play* all the cadences after writing them. The minim chords should be played lightly, and the semibreve chords should be *strongly* accented.

Group A. Perfect Cadences.

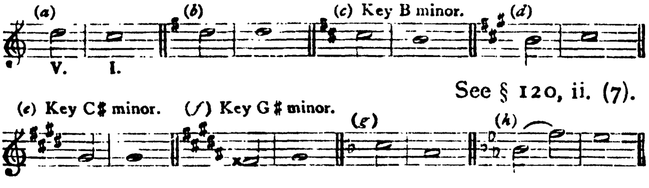
55. Add Alto and Tenor parts to complete these " perfect cadences " :—



56. Write perfect cadences above these Bass notes, using a different melody each time for the Treble part. (See *Intermediate Text-Book,* Figs. 76, 77, 78.) Mark the " Tierce de Picardie " :—



57. Write the perfect cadences of which these notes form the Treble part:—



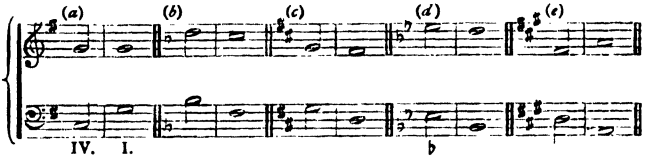
See § 120, ii. (7).

58. Write perfect cadences in the major keys of C, D, and E♭, using the chord of the " dominant 7th." See § 121.

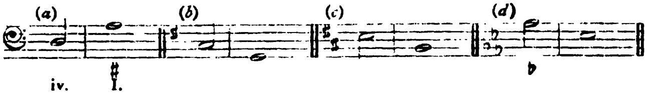
59. Write perfect cadences in the minor keys of C♯, D, and E, using the chord of the " dominant 7th." See § 121.

Group B. Plagal Cadences.

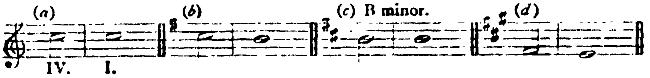
60. Add Alto and Tenor parts to complete these " plagal cadences " :—



61. Write plagal cadences above these Bass-notes, using a different melody each time for the Treble part, as in Fig. 81 :—



62. Write the plagal cadences of which these notes form the Treble part :—

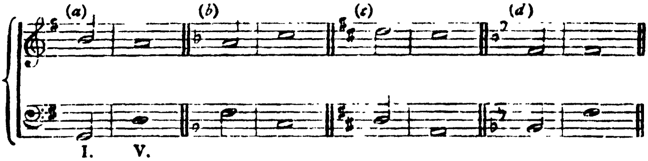


63. Write plagal cadences in the major keys of D and E♭.

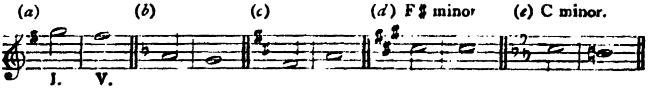
64. Write plagal cadences in the minor keys of A and B.

Group C. Imperfect Cadences.

65. Add Alto and Tenor parts to complete these " imperfect cadences " :—



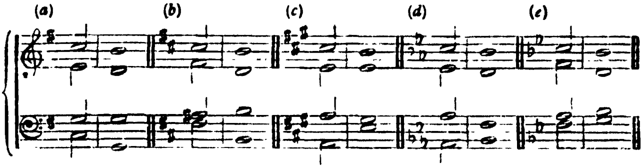
66. Write the imperfect cadences of which these notes form the Treble part :—



67. Write imperfect cadences in the keys of A *major* and E *minor*.

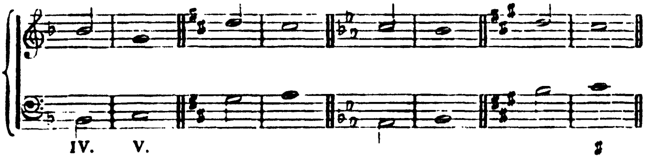
Group D. Recognition and naming of various Cadences.

68. Give the name of each of the following cadences :—

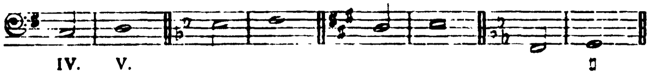


Group E. Mixed Cadences.

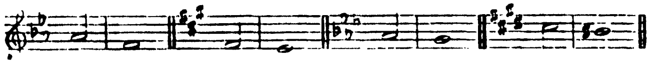
69. Add Alto and Tenor parts to complete these "mixed cadences" :—



70. Write mixed cadences above these Bass-notes, using a different melody each time for the Treble part :—



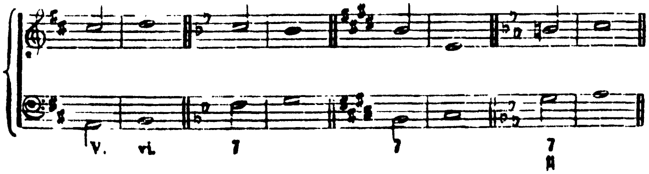
71. Write the mixed cadences of which these notes form the Treble part :—



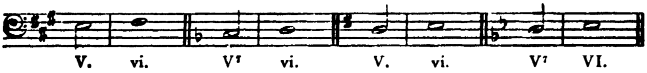
72. Write mixed cadences in the keys of E major and D minor.

Group F. Interrupted Cadences.

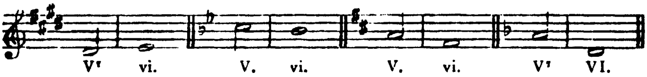
73. Add Alto and Tenor parts to complete these "interrupted cadences" :—



74. Write interrupted cadences above these Bass-notes, using a different melody each time for the Treble part :—



75. Write the interrupted cadences of which these notes form the Treble part :—



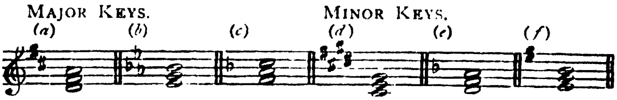
76. Write interrupted cadences in the keys of A♭ major and C♯ minor.

CHAPTER VII.

INVERSIONS OF TRIADS—PHRYGIAN AND PATHETIC CADENCES.

Group A. The construction of First Inversions.

77. On one staff, in three-part harmony, write first and second inversions of these triads. Figure the Bass of each chord, and give its " radical indication " :—



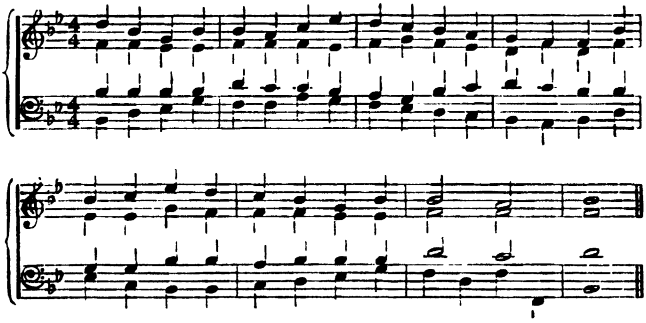
Group B. The reduction of horizontal arpeggio figures to simple perpendicular chords.

78. Write as *chords* the arpeggio figures contained in the following extract from the *Finale* of **Beethoven's Sonata** in E♭, No. XVIII. In counting the bars, reckon as " one " the first *complete* bar of the movement :—Bars 146 to 150. Figure the Bass of each chord.

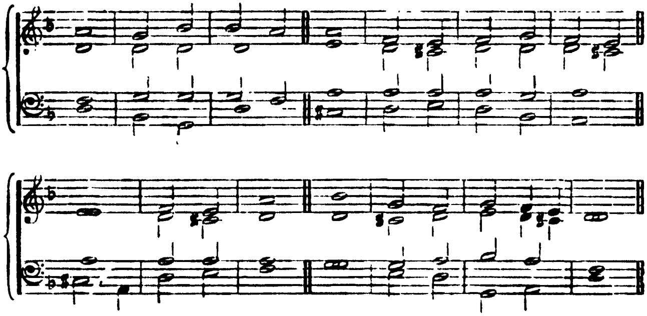
Group C. Transposition and Harmonic Analysis.

79. Transpose these Exercises into the keys directed and write them in Vocal Score, with C clefs for inner parts. Figure the Bass of each inversion, and give the "radical indication" of every chord :—

(*a*) Transpose to C major.



(*b*) Double Chant. Transpose to E minor.



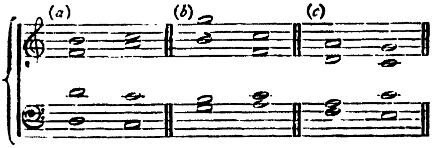
In the above Exercises point out which $\substack{6\\4}$ chords are "cadential" and which are "passing."

Group D. The writing of specified First Inversions.

80. On two staves, in four-part harmony, write the "first inversions" of the *major* triads of C and D, with the root in the Treble; also the first inversions of the *minor* triads of G and A, with the fifth of the root in the Treble.

Group E. The Detection of Faults.

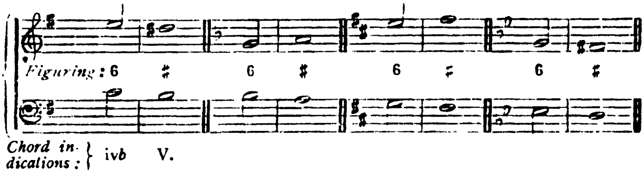
81. Say what is wrong in each of these progressions :—



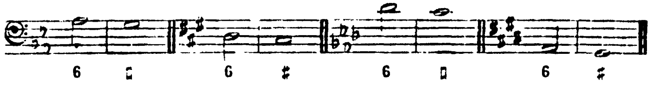
Group F. Phrygian Cadences.

82. Add Alto and Tenor parts to complete these " Phrygian cadences " :—

N.B.—When writing Exercises in Open Score, write the " figuring " *above* the Bass part, and the " chord indications " *below* the Bass part.



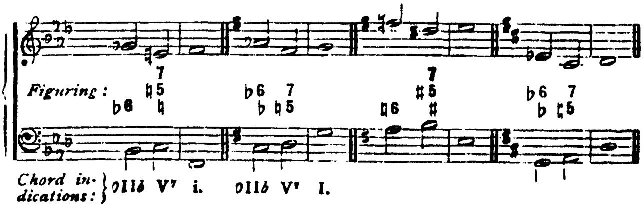
83. Write Phrygian cadences above these Bass-notes :—



84. Write Phrygian cadences in the keys of F minor and C♯ minor.

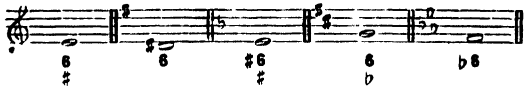
Group G. Pathetic Cadences.

85. Add Alto and Tenor parts to complete these " Pathetic cadences " :—


Figuring: ♭6 7 ♮5 ♮ ♭6 7 ♭ ♮5 ♮6 7 ♯5 ♯ ♭6 7 ♭ ♮5
Chord indications: ♭IIb V⁷ i. ♭IIb V⁷ I.

Group H. The writing of Inversions above Bass-notes.

86. Add the two upper notes to complete these first inversions of triads, in three parts and in close position :—



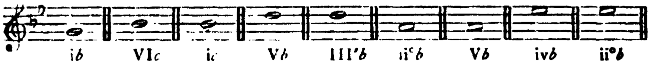
Group I. The writing of specified Second Inversions.

87. On two staves, in four-part harmony, write the "second inversions" of the *major* triads of G and E♭, with the fifth of the root in the Treble; those of the *minor* triads of C and A, with the root itself in the Treble; and those of the *minor* triads of D and F♯, with the third of the root in the Treble.

Group J. The writing of Inversions of Triads below Melody Notes.

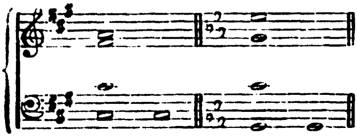
88. Write Alto, Tenor, and Bass parts below these Treble notes, according to the "radical indication" :—

Key G minor.



Group K. The After-progression of Second Inversions.

89. Follow each of these second inversions with a *major* common chord on the given note :—



CHAPTER VIII.

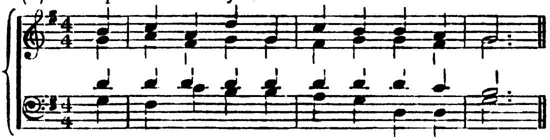
THE CHORD OF THE DOMINANT 7TH AND ITS INVERSIONS.

Group A. Transposition and Harmony Analysis.

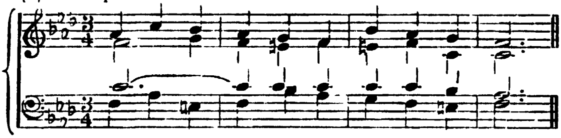
90. Transpose these Examples into the keys directed, writing them in Open Score, with proper clefs for the inner

parts. *Above* the Bass give the figuring of every chord which needs the same, and *below* the Bass give the " radical indication " of every chord :—

(*a*) Transpose to F major.



(*b*) Transpose to G♯ minor.

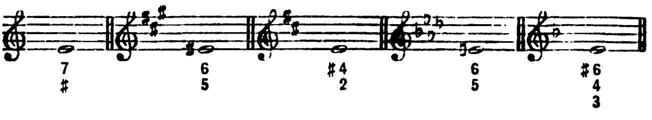


91. Copy the following extracts from **Beethoven's Sonatas.** Figure the Bass and give the " radical indication " of every chord. In counting the bars, reckon the *first complete bar* of any movement as " one " :—

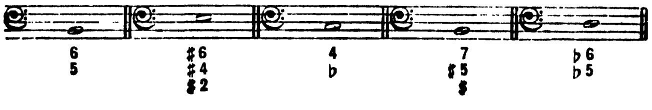
(*a*) Sonata II., bars 25 to 32 of the first movement (two Trebles and Bass). (*b*) Sonata IV., bars 59 to 67 of the first movement. (*c*) Sonata IV., bars 8 to 12 of the second movement. (*d*) Sonata IV., bars 1 to 10 of the third movement.

Group B. The writing of Chords of the 7th and their Inversions over given Bass notes.

92. Above each of these notes write the chord indicated by the figuring ; each chord to consist of four notes, including the given note :—

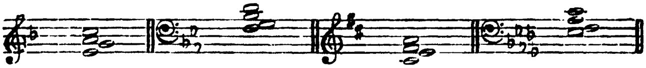


93. Above each of these notes write the chord indicated by the figuring ; each chord to consist of four notes, including the figuring. Add the *minor* key-signature to each example :—



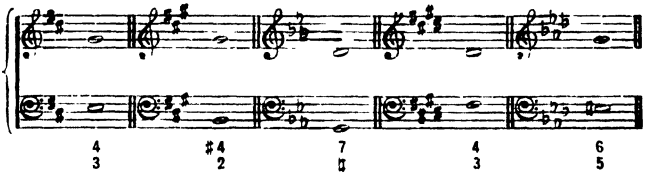
Group C. The alteration of given Chords into Dominant 7ths and their Inversions.

94. To the following chords add the accidentals which are necessary to make them inversions of the dominant 7th. Do not alter the pitch of the Bass-note. Figure each chord :—



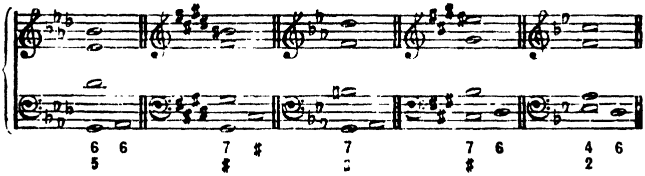
Group D. The Completion of partially given Dominant 7ths and their Inversions.

95. Add Treble and Tenor notes to complete these chords, according to the figuring :—

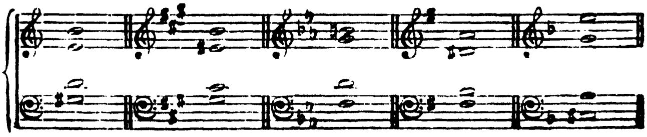


Group E. The Resolution of Dominant 7ths and their Inversions.

96. Resolve these discords, according to the figuring :—

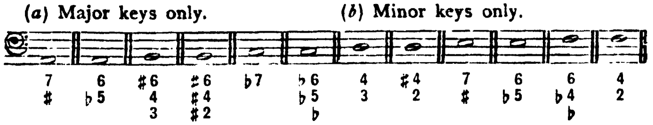


97. Resolve these discords, and mark the root of each chord with a w :—



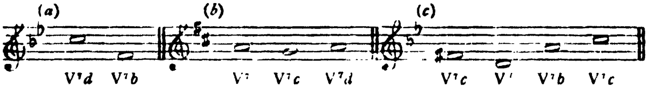
Group F. The building up and resolution of Dominant Discords above a given Bass.

98. Add Treble, Alto, and Tenor parts to the following Bass-notes, according to the figuring. Prefix the proper key-signature to each chord, and resolve it upon the tonic chord or one of its inversions :—



Group G. The writing and resolution of Dominant Discords below given Melody notes.

99. Add Alto, Tenor, and Bass parts to the following Treble notes, according to the "radical indications," and resolve each chord upon the tonic triad or one of its inversions :—

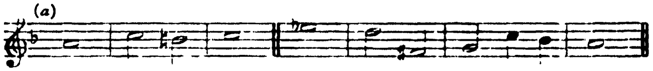


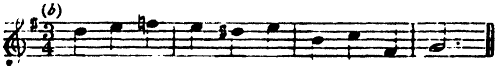
CHAPTER IX.

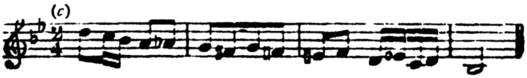
Modulation, Figuring, and Analysis.

Group A. The Detection of Modulation in Melodic passages.

100. Indicate the keys through which these melodies pass :—







Group B. The Detection of Modulation in Harmonic passages.

101. Indicate the keys through which the following extracts from **Beethoven's Sonatas** pass :—

(*a*) Sonata XI., Rondo, bars 18 to 21. (Count the first ***complete*** bar as "one.")
(*b*) ,, XXII., 1st movement, bars 20 to 24.
(*c*) ,, XXX., 3rd movement, first 16 bars, ***Andante molto cantabile ed espressivo.***
(*d*) ,, XXXI., 2nd movement, first 41 bars, ***Allegro molto.***
(*e*) ,, VIII., Rondo, bars 16 to 25. (Count the first ***complete*** bar as "one.")
(*f*) ,, V., 1st movement, bars 32 to 48.
(*g*) ,, III., Adagio, bars 1 to 11.
(*h*) ,, XII., The first 30 bars of the Funeral March (3rd movement).

TEACHING DEPARTMENT.

The College provides complete and systematic instruction and training in every recognised musical subject for all classes of Musical Students during the day and on certain evenings.

Special preparation is available by all Students for the Public Examinations of the College, for the musical degrees of the Universities and for the Royal College of Organists.

The Easter, Summer, and Michaelmas Terms commence respectively in January, April, and September.

Students are received for single subjects as well as for a course which is arranged to suit the special needs of Students.

The College Orchestra, the Choirs, the Light Opera Class, and the various Ensemble Classes, are also open to those not attending the College for other subjects.

Courses of Lectures on Musical subjects, The Art of Teaching as applied to Music, etc., are given during Term by recognised Teachers of the London University.

There is a Junior School of Music to which pupils are received up to the age of 16, Students being admitted for a single subject or for the full Course.

Students of the College have free access to the Concerts, Lectures, the College Choirs, and the advantage of practising Solos with the Orchestra when sufficiently advanced. Students of Orchestral Instruments when sufficiently advanced are admitted to play in the Orchestra without fee.

Scholarships.

The Bambridge Pianoforte Scholarship, annual value £100 a year or tuition and maintenance; see Regulations.

Forty to Fifty Free Scholarships are awarded annually, and are open to all British subjects, subject to the Regulations.

Eighteen Scholarships for matriculated students of the Universities of London and Durham provide complete instruction in preparation for the degree of Bachelor of Music in these Universities—the College paying the Scholars' fees for the University Examinations.

EXAMINATIONS DEPARTMENT.

The Higher Examinations are held at the College in January, April, and July, as under:—

Theory and Practice of Composition.

1. For the Diploma of Associate in Music (A.Mus. T.C.L.); the Subjects being Musical Rudiments, Musical History, Harmony, Counterpoint, and The Art of Teaching.
2. For the Diploma of Licentiate in Music (L.Mus. T.C.L.); the subjects being Harmony, Counterpoint, Double Counterpoint, Imitation, Canon and Fugue, Form in Musical Composition, Instrumentation, and The Art of Teaching as applied to Music.

The distinction of Fellowship (F.T.C.L.) is also granted under the Regulations.

Instrumental and Vocal.

The special Sections in this Branch are:—

i. Pianoforte. ii. Organ. iii. Violin, Violoncello, Harp, or other Orchestra Instrument. iv. Singing.

The Examination of every Candidate includes a paper on Musical Rudiments, and a paper on The Art of Teaching as applied to Music, in addition to the practical requirements in each Section.

Candidates who satisfy the Examiners are respectively classed as Associates (A.T.C.L.), or Licentiates (L.T.C.L.). Special provision is made for Candidates not desirous of qualifying as Teachers.

Local Examinations in the Theory of Music are held at about 600 Public and School Centres in the British Isles, and in the Dominions in June and December. Since 1877 525,000 Candidates have been examined.

The Examinations are conducted in Seven Divisions, viz.:—I. Preparatory; II. Junior; III. Advanced Junior; IV. Intermediate; V. Advanced Intermediate; VI. Senior; VII. Higher Local.

Divisions I to V are especially designed to meet the requirements of Schools.

Local Examinations in Instrumental and Vocal Music are held throughout each Session at the various Centres both in the British Isles and the Dominions. The date at any particular Centre may be learned from the Local Secretary. Since 1879, 785,000 Candidates have been examined.

The Examinations are conducted by Visiting Examiners from the College.

The Subjects of Examination are:—

i. Pianoforte Playing, in nine Divisions: "Initial," "First Steps," Preparatory, Advanced Preparatory, Junior, Intermediate, Senior, Advanced Senior, and Higher Local.

ii. Violin Playing, in six Divisions: "First Steps," Preparatory, Junior, Intermediate, Senior, and Higher Local.

iii. Violoncello Playing, in four Divisions: Preparatory, Junior, Intermediate, and Senior.

iv. Solo Singing, in five Divisions: Preparatory, Junior, Intermediate, Senior, and Higher Local.

v. Organ Playing, in five Divisions: Preparatory, Junior, Intermediate, Senior, and Higher Local.

vi. Class Singing, in two Divisions: Junior and Senior.

vii. Elocution, in five Divisions: Preparatory, Junior, Intermediate, Senior, and Higher Local.

viii. Ensemble Playing, in three Divisions: Junior, Intermediate, and Senior.

One Hundred and Twelve Local Exhibitions in Practical Music, **Forty** in Theory of Music, and **Sixteen** in Elocution (tenable at Local Centres in the United Kingdom, and the Dominions), and a number of **National Prizes** are annually awarded in connection with the Local Examinations without any restriction as to age.

List of Local Centres approved by the Board for the holding of Local Examinations in Music in the British Isles.—Aberdeen, Aberystwyth, Accrington, Alloa, Arbroath, Ashford, Ashton-in-Makerfield, Balham, Ballymena, Bainbridge, Banbury, Bangor, Barnstaple, Barnsley, Barrow-in-Furness, Bath, Bedford, Belfast, Belper, Birkenhead, Birmingham, Blackburn, Blackpool, Blaenau Festiniog, Bodmin, Bolton, Boston, Bournemouth, Bradford, Brechin, Bridgend, Bridlington, Brighton and Hove, Bristol, Brixton, S.W., Buckie, Burnley, Burton-on-Trent, Bury St. Edmunds, Buxton, Callander, Cambridge, Camelford, Canterbury, Cardiff, Carlisle, Carmarthen, Carnarvon, Chatham, Chelmsford, Cheltenham, Chester, Chichester, Chorley, Colchester, Coleraine, Cork, Coventry, Crewe, Crewkerne, Croydon, Darlington, Derby, Dewsbury, Dingwall, Doncaster, Douglas (I. of Man), Dover, Driffield, Dublin, Dumfries, Dundee, Ealing, Eastbourne, Edinburgh, Exeter, Falkirk, Filey, Fishguard, Five Mile Town, Folkestone, Frome, Garnant, Glasgow, Glastonbury, Gloucester, Golders Green, Great Missenden, Great Yarmouth, Greenock, Grimsby, Guildford, Halifax, Harrogate, Hastings, Haverfordwest, Haverhill, Hertford, High Wycombe, Holyhead, Horsham, Huddersfield, Hull, Isle of Wight, Inverness, Ipswich, Kidderminster, Kilmarnock, King's Lynn, Lancaster, Leamington, Leeds, Leicester, Leigh, Letchworth, Leven, Limerick, Lincoln, Liverpool, Llanelly, Llandudno, London, Londonderry, Loughton, Lowestoft, Luton, Macclesfield, Manchester, Maidstone, Merthyr Tydfil, Middlesbrough, Milford Haven, Neath, Nelson, Newbury, Newcastle-on-Tyne, Newcastle Emlyn, New Cross, Newport (Mon.), Newry, Northampton, Norwich, Nottingham, Oldham, Oswestry, Oxford, Peebles, Pembroke Dock, Perth, Peterborough, Petersfield, Plymouth, Port Talbot, Portsmouth, Preston, Rawtenstall, Reading, Richmond (Yorks.), Rochdale, Ryde, St. Austell, St. Dennis, St. Ives (Hunts.), Salisbury, Scarborough, Scunthorpe, Selby, Sheffield, Shields, Shrewsbury, Skipton, Sligo, Sleaford, Southampton, Southend-on-Sea, Southport, Stockport, Stoke-on-Trent, Streatham, S.W., Stroud, Sunderland, Surbiton, Swansea, Swindon, Taunton, Tenby, Todmorden, Torquay, Tottenham and Edmonton, Towyn, Truro, Tunbridge Wells, Walsall, Walthamstow, Waterford, Watford, Warrington, Wellingborough, Wembley, West Ham, West Hartlepool, Weston-super-Mare, Weymouth and Dorchester, Whitehaven, Wigan, Wimbledon, Winchester, Windsor, Wisbech, Wolverhampton, Woolwich, Worcester, Wrexham, Yeovil, York.

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A TEXT-BOOK

OF

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(Theory of Music)

ADVANCED INTERMEDIATE DIVISION.

Prepared for the Use of Students,

MORE ESPECIALLY FOR THE

LOCAL CENTRE EXAMINATIONS IN
THEORY OF MUSIC

OF

Trinity College of Music,

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PREFACE.

THIS work is primarily intended as a Text-Book for the preparation of Candidates for the Advanced Intermediate Division of the Trinity College Local Examinations in The Theory of Music. It pre-supposes a full and complete acquaintance with the contents of the Text-Books already issued for Candidates preparing for the *Preparatory* and *Junior* Divisions of the same Examinations; and is, in fact, a continuation of those former works. Students who are not Examination Candidates must therefore be fully instructed in the *Junior Text-Books* before they can be qualified to commence the study of the present work. For the convenience of those who may have passed previous Examinations of the College some time ago, or who may have acquired the same knowledge from other sources, a brief *resumé* of the chief contents of the *Junior Text-Books* has been given in these pages.

The Syllabus for the **Advanced Intermediate Division** has been planned by the College to especially meet the requirements of Students who undertake the study of Harmony, not so much with the intention of attaining facility in Musical Composition, but rather with a view to its being helpful as a preparation for **sight-reading,** and for **listening to music.** The chief objects of this *Advanced Intermediate Text Book* are, therefore, three in number :—

(i.) To assist the Student in analyzing music by determining (*a*) what is the principal melody of any given passage, (*b*) how it is accompanied, and (*c*) with what manner of harmony.

(ii.) To train his **eye** in quickly recognising harmonic progressions, whether written in perpendicular *Chord groups*, or in horizontal *Arpeggio figures*.

(iii.) To train his **ear** in readily perceiving the constituent sounds of any harmonic progressions, recognising at the same time their perpendicular or simultaneous relationship, as well as their horizontal or melodic needs.

It should be obvious that if this system of instruction be faithfully carried out, a Student is by its means not only put in the right direction for ultimately becoming an efficient sight-reader and an appreciative listener, but is also prepared to a large extent for the future exercise of any gift for Musical Composition which he may possibly possess.

It is hoped that this book will also be found useful (in the earlier stages of their preparation) to those Candidates who are reading for the Harmony Sections of the Examinations for the diplomas of Associate and Licentiate in Music; as well as for the *vivâ voce* Harmony questions in connection with the Higher Examinations in *Practical* Music held by the College.

Adv. Inter.

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CHAPTER I.

TRANSPOSITION FROM CLEF TO CLEF (G, C, AND F); FROM KEY TO KEY; AND FROM SHORT TO OPEN SCORE, OR *VICE VERSÂ*.

1. A **Tone** is any musical sound which has a distinct and *definite pitch*.

2. When we hear a tone we can find out exactly how high or how low it is, and we are also able to give it a place in some Major, Minor, or Chromatic Scale.

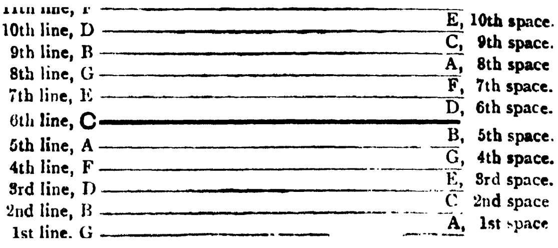
3. Tones are expressed in musical notation by signs called **Notes.**

4. A definite pitch can be assigned to any note by writing it upon a particular *line*, or within a particular *space* of the **Great Staff.**

5. **The Great Staff**—with the names of its eleven lines and ten intervening spaces—having been explained already in the Preparatory and Junior Text-Books—needs no further comment here.

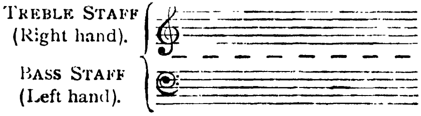
Fig. 1. The "**Great Staff.**"

Notice the thick "Middle C" line which corresponds with the C in the middle of the Keyboard.



6. **Pianoforte Score,** or **Short Score**—in which the Treble and Bass clefs are used—has also been explained :—

Fig. 2.



Here, in Pianoforte (or Short) Score, the Great Staff is divided in the following manner :—The *five upper* lines form a separate staff for the right hand or Treble part; the *middle line* C is omitted (a short, or *leger* line, being provided for the writing of this sound); and the *five lower* lines form a separate staff for the left hand or Bass part. The two staves are connected by a brace or bracket at the left-hand side, but the space between the A and E lines, where the middle C line has been omitted, is *widened.*

7. When any **portion** of the Great Staff thus becomes **selected** or **separated** from the remainder, a **Clef** is necessary; in order to show which particular set of five lines is being used.

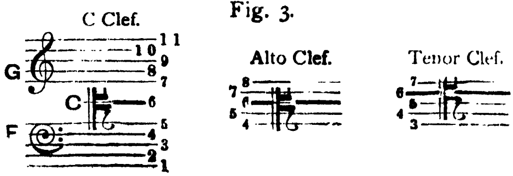
8. There are **three clefs** or *line*-names in use, and these signs are corruptions or modifications of the letters F, G, and C.

9. The Clef or line-name F is placed upon the fourth line of the **Bass staff** (so called because it contains the lower sounds, those at the *base* of the ladder); this is also the fourth line of the Great Staff shown in Fig. 1.

10. The Clef or line-name G is placed upon the second line of the **Treble staff** which is the eighth line of the Great Staff shown in Fig. 1.

11. The Clef or line-name C is placed on the middle or sixth line of the Great Staff, whenever that line happens to be one of five selected from the **middle** of the Great Staff. See Fig. 3 :—

Fig. 3.


C Clef.

Alto Clef.

Tenor Clef.

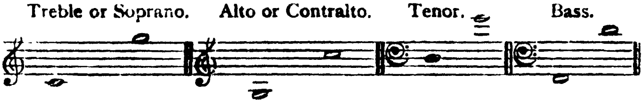
12. The **necessity for using the C Clef** may be thus explained :—

It often happens, that in writing for a particular voice or instrument, only the middle part of the Great Staff of eleven lines is required. In such cases, if the Treble staff only were used, the music would require a great number of leger lines *below* the staff; and if the Bass staff only were used, an equally large number of leger lines *above* the staff would be necessary. To overcome this practical inconvenience, a third clef has been provided, which gives the name and pitch of the note **Middle C** to the line upon which it is placed; and a selection of four other *adjoining lines* from the midst of the Great Staff is taken to form a new staff of five lines, for the special voice or instrument which is being written for. Fig. 3 exhibits the C clef placed on its own proper line in the midst of the Great Staff, as well as two different positions it occupies upon a five-lined staff, when the two particular voices named (Alto and Tenor) are being written for.

13. There are **four kinds of voices** in a choir or chorus: (i.) Treble or Soprano; (ii.) Alto or Contralto; (iii.) Tenor; (iv.) Bass.

14. The following are (approximately) the **lowest and highest notes** assigned to each voice in writing music:—

Fig. 4.



Treble is a boy's voice, *Soprano* is a woman's voice, *Alto* is a man's (high or *falsetto*) voice, *Contralto* is a woman's deep voice.

15. In a **Vocal** or **Open Score**, each voice is written for in its own proper clef on a separate staff.

16. Each separate **melody** (*i.e.*, succession of single sounds) sung by one voice (or by one set of voices of the same kind) is called a **Part.**

17. **Relative places of Parts in a Vocal Score.**—The Treble part has the highest notes of the music; it generally carries the Principal Melody or "tune" of the piece. The

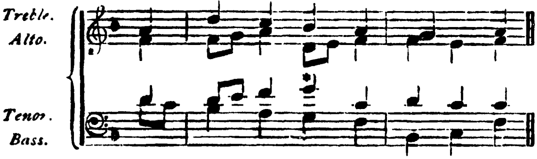
Alto part is written below the Treble; the Tenor is below the Alto; and the Bass has the lowest notes of all. See Fig. 5.

18. The Treble and Bass parts attract the greatest attention from the ear, by reason of their having the highest and lowest notes of the score assigned to them—these are called **extreme** or **outside parts**; the Alto and Tenor voices, which are more or less buried in the midst of the score, are called **middle** or **inner parts.**

19. **Crossing the Parts.**—This happens when, in order to secure some special effect, two parts are relatively placed contrary to their ordinary vertical position in the score:—

Fig. 5.

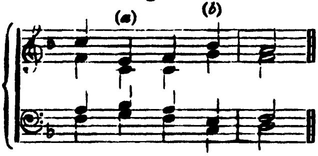
J. S. Bach: *S. Matthew Passion.*



At * the Tenor part has a higher note than that assigned to the part next above it—the Alto. This is evidently done to secure the persistent scale-passage in the Tenor, and to preserve the melodic figure or pattern of the Alto part.

20. **Overlapping the parts.**—This happens when one part skips to a lower position—Fig. 6 (*a*)—or to a higher position—Fig. 6 (*b*)—than that of the part next to it in the score:—

Fig. 6.



At Fig. 6 (*a*) the Treble has a note lower than that just previously sung by the part next below it, *i.e.*, it *overlaps* the Alto. At Fig. 6 (*b*) the Alto overlaps the previous Treble note, and the Tenor overlaps the Bass.

21. Both **crossing** and **overlapping** the parts tend to endanger their identity, by making it difficult for the ear to follow them individually.

22. The **C Clef** must now be thoroughly mastered. It is comparatively easy to read from, if these three facts be remembered :—

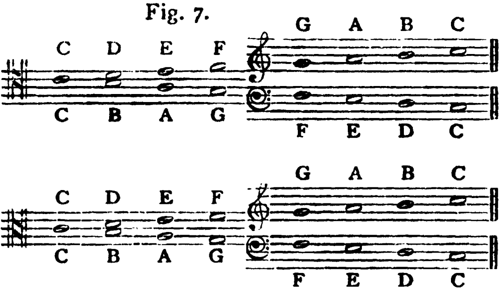
(i.) The line upon which the C clef is placed is *always* Middle C line.

(ii.) Any line or lines *above* the C clef line will belong to the lower portion of the *Treble* staff.

(iii.) Any line or lines *below* the C clef line will belong to the upper portion of the Bass staff.

23. This can be very clearly understood by a reference to Fig. 7 (*a*), (*b*) :—

Fig. 7.


(*a*) TENOR CLEF :

(*b*) ALTO CLEF :

Fig. 7 (*a*) shows the Tenor staff of which Middle C is the *fourth* line (counting *upwards*). Being the voice next above the Bass, it requires more lines from the Bass staff than from the Treble. Hence, its three *lower* lines are the three *upper* lines of the Bass staff; its *top* line is the same as the *bottom* line of the Treble staff. The Tenor staff is used in writing for the Tenor voice and the Tenor Trombone in the Orchestra; sometimes it is used for the Violoncello and Bassoon.

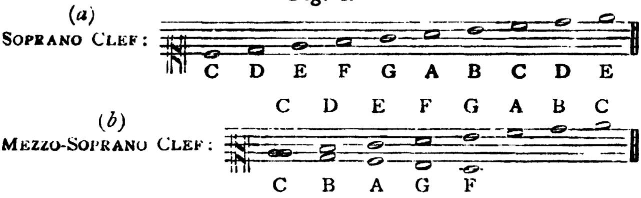
Fig. 7 (*b*) shows the Alto staff, of which Middle C is the middle line of the five. Being a higher voice than the Tenor it requires one line more from the Treble staff, and one line less from the Bass staff, than is needed by the Tenor staff. Hence, its two *uppermost* lines are the two *lowest* lines of the Treble staff; its two *lowest* lines are the two *uppermost* lines of the Bass staff. The Alto staff is used in writing for the Alto voice and the Alto Trombone; it is also used for the Viola, a stringed instrument which stands between the Violin and Violoncello in an Orchestral score.

24. In old English church music, and in modern vocal scores published abroad, the **Treble** or **Soprano** voice is

often written for with the C clef placed on the first or lowest line of a five-lined staff, as in Fig. 8 (*a*).

The **Mezzo-Soprano** voice is also to be found written for with the C clef placed on the second line of a five-lined staff, as in Fig. 8 (*b*).

Fig. 8.



Although the use of the Soprano and Mezzo-Soprano clefs may be but seldom required in Examination papers, they are given here for the sake of reference and completeness.

Hints for Examinations.

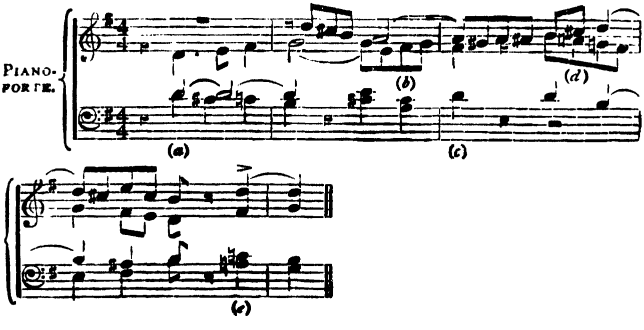
Hint I.—At Examinations, candidates are asked to transpose **from Clef to Clef** in one of two ways:—

(i.) A passage of music written in Short or Pianoforte Score with the G and F clefs has to be re-written in Open or Vocal Score, using the C clef for Alto and Tenor parts; or,

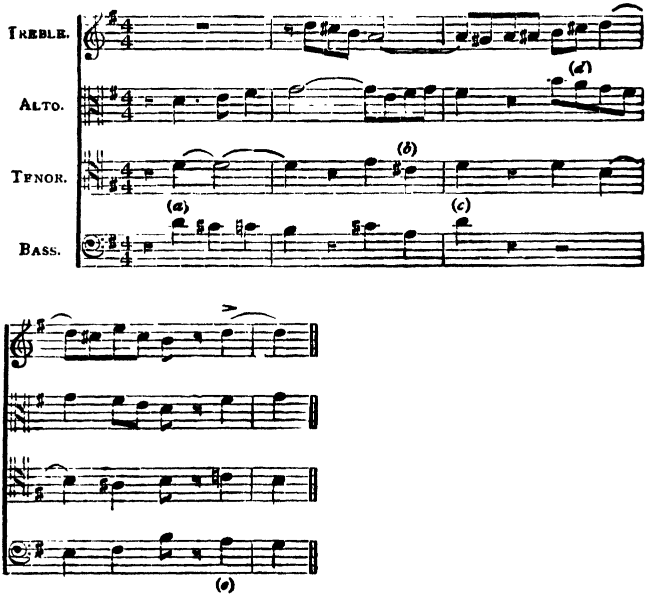
(ii.) A passage written in Open or Vocal Score with the C clef used for one or more of its parts, has to be re-written in Short or Pianoforte Score with the G and F clefs.

Fig. 9 exhibits such a passage written in Short Score at (**A**), and in Open Score at (B):—

Fig. 9. (**A**) **Short Score.**



(B) The same passage in Open Score.



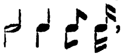
Hint II.—In training himself for this kind of work, the student should first gain facility in transposing a single part from the Treble or Bass staff to the Alto or Tenor staff, and *vice versâ.* In doing this, he must begin by observing which of the five lines of the Alto or Tenor staff is Middle C. *The clef will show him this.* He can then easily find places for all the notes of the given melody by asking himself in every case: Is the note I have to write *above* or *below* Middle C? The answer will fix the staff-position of the required note if Fig. 7 be kept well in mind.

Hint III.—When writing in Open Score, the stems of the notes should be turned up or down according to their position below or above the middle line of the staff. Low notes have their stems turned up, and *vice versâ*, so that the stems shall not project beyond the staff.

Hint IV.—All **unisons** must be written in each of the staves belonging to the parts which sing the same sound. See Fig. 9 (*a*), (*c*). At (*a*) the unison clearly belongs to both Tenor and Bass parts, since the note D has a double stem. At (*c*) this fact is not so clear. D is easily recognised as a *Tenor* note, and a moment's thought will show that it is a *Bass* note as well, since, if it were *not*, there would be a *whole* bar's rest for the Bass part.

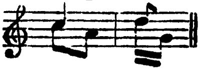
Hint V.—**Accidentals** require looking after. At (*b*) in the *short* score, a second sharp is unnecessary for the last note of the Tenor in this bar, because the previous C played by the left hand has been accidentally sharpened. But at (*b*) in the *open* score, a sharp *is* necessary for the last Tenor note, because there has been no previous C♯ in the bar *for that particular voice.* Again, at (*d*) in the short score, a ♮ is necessary for each of the Alto notes, A and G, in order to contradict sharps prefixed to previous notes bearing these names which have been played by the same hand. At (*d*) in the *open* score, these naturals are unnecessary, because no previous A♯ or G♯ has been sung by the Alto voice. The same remark will apply to the Bass note at (*e*).

Hint VI.—**When writing in short score,** the stems of the Treble and Tenor notes should be turned *up*, whilst those of the Alto and Bass notes should be turned *down*.

If a **unison** note sung by two voices *which begin and end together* be a semibreve in duration, two semibreves should be written side by side, or linked, so :— or ; but a unison of the length of a minim, crotchet, quaver, etc., should be represented by *one note* only, with two stems—the upper stem belonging to the upper voice, the other to the lower voice, thus :— , etc.

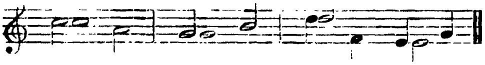
Hint VII.—Sometimes two voices may *begin* in unison, and then one of the notes is sustained, whilst the other moves. When this is so, two *black* notes, although of different lengths, should have *the same note-head* to begin with, the difference of duration being shown by the hook or hooks :—

Fig. 10.



But a semibreve and a minim, or a minim and a crotchet, must have *separate note-heads*, that of the shorter duration being written *first* :—

Fig. 11.



Hint VIII.—It is well to reproduce all the accidentals in an open score when transcribing a passage in short score, since the latter is often used by singers of part-music—such as Chants, Hymn Tunes, Church Services, etc. When a short score is completed, examine each of the two staves to see if any additional accidentals be needed, as at (*d*) and (*e*) in Fig. 9, where *one* of the parts played by the same hand needs a ♮ to contradict an accidentally raised note which belongs to the other part.

Hint IX.—How to transpose from one key to another has been already explained in Chapter IX. of the *Advanced Junior Division Text-Book.* The process may be thus briefly summarized :—

(i.) See if the passage has to be transposed *up* or *down.*

(ii.) *How much* up or down?

(iii.) Find the new key-note.

(iv.) Write the *new* key-signature, following this with the *given* time-signature.

(v.) In your rough copy (*not* that which you present to your Examiners) mark all accidentally *raised* notes with a small letter **r**, and all accidentally *lowered* notes with a small letter **l**.

(vi.) Ascertain whether, in the new key, l will = ♭, ♭♭, or ♮; or if r will = ♯, ×, or ♮, and mark the new notes accordingly.

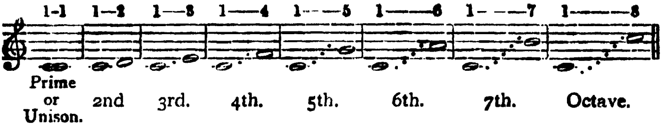
CHAPTER II.

INTERVALS : DIATONIC AND CHROMATIC, SIMPLE AND COMPOUND, DIRECT AND INVERTED.

The information respecting Intervals and their Inversions which has already been given in the *Advanced Junior Division Text-Book*, may here be briefly summarized :—

25. An **Interval** is the scale-distance between any two sounds; it has a numerical and qualifying name. The **numerical name** of an interval depends upon the number of lines and spaces of the staff which it covers, including the staff-positions of the two notes which form the interval.

Fig. 12.



The **qualifying name** of an interval depends upon the number of semitones the interval contains.

26. A **semitone** is the smallest interval which can be played upon the pianoforte. There are **two kinds of semitone**—diatonic and chromatic.

27. A **Diatonic semitone** lies between the 3rd and 4th, and 7th and 8th degrees of every *Major* Diatonic Scale: its two notes bear *different alphabetical names.*

A **Chromatic semitone** lies between two notes bearing the *same alphabetical name,* one of which is raised or lowered by an accidental.

28. Counting upwards from the tonic of any major scale, as in Fig. 12, *all the intervals thus obtained are either perfect or major.*

29. The **perfect intervals** are the prime or unison—4th, 5th, and 8ve.

The **major intervals** are the 2nd, 3rd, 6th, and 7th.

Minor intervals contain one semitone *less* than major intervals.

Augmented intervals contain one semitone *more* than perfect and *major* intervals; but the augmented 3rd and 7th are neither used in melody nor (essential) harmony.

Diminished intervals contain one semitone *less* than perfect and *minor* intervals; but the diminished 2nd and 6th are neither used in melody nor (essential) harmony.

30. All intervals are either *concords* or *discords.*

31. The **concords** leave a finished, satisfied effect on the ear; they are *independent.*

The **discords** leave an unfinished, unsatisfactory effect; they are *dependent.*

32. Concords may be either *perfect* or *imperfect.*

The **perfect concords** are the prime or unison—4th, 5th, and 8ve.

The **imperfect concords** are the major and minor 3rd; major and minor 6th.

33. The **discords** are the major and minor 2nd and 7th, and all diminished and augmented intervals

34. **An interval is inverted** by making its two notes change their relative position, the lower note becoming the upper, or *vice versâ.*

35. The **inversion of an interval** is readily found by subtracting the number of the original interval from 9.

After inversion :—

Perfect intervals remain perfect.
Major ,, become minor.
Minor ,, ,, major.
Augmented ,, ,, diminished.
Diminished ,, ,, augmented.

Hints for Examinations.

At Examinations, candidates may be asked :—

(i.) To state the numerical and qualifying names of a given interval.

(ii.) To write a certain interval *above* a given note.

(iii.) To write a certain interval *below* a given note.

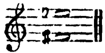
(iv.) To write certain intervals which belong to *given keys*.

(v.) To write the *inversion* of any given interval.

(vi.) To name the *enharmonic equivalent* of a given interval.

Hint I.—In the case of (i.) and (ii.) first regard the lower note of the given or desired interval as a **key-note.** See next if the upper note of the given interval is the *same* as the corresponding degree of the *major* scale which has the lower note of the interval as its key-note. If *different*, see if the given or desired note is nearer to or farther away from that key-note, than the diatonic degree supplied by the scale-formula given in Fig. 12.

For instance, suppose we have to find the name of this interval :—

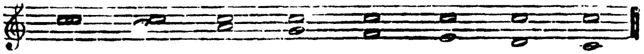


E is a seventh above F. Think of F♯ as a key-note. The seventh note of the scale of F♯ major is E♯. That is a major 7th from the key-note. We see then that the given interval is *not a major 7th*. E♮ would be a *minor* 7th, therefore E♭ is a *diminished* 7th above F♯.

Next, let us suppose that F♯ is given, and we are asked to write a diminished 7th above it. Again, think of F♯ as a key-note. The seventh degree of the scale of F♯ major being E♯, E♮ is the minor 7th, and E♭ is the *diminished* 7th above the note F♯.

Hint II.—By the law of inversion (§ 35), the intervals between the upper tonic and the notes of the descending **major scale** are either *minor* or perfect, because in the ascending major scales these intervals were either *major* or perfect.

Fig. 13.

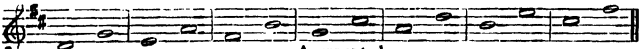


Keeping this descending major scale in mind as a standard of measurement, it will be quite easy to find any required note which has to be written as an interval *below* a given note.

Hint III.—If asked to write certain intervals which belong to a given key; write first an interval of the same *numerical* name above each of the seven degrees of the scale belonging to the given key, and then select the one or more intervals which possess the required *qualifying* name.

For instance, suppose we are asked to write the augmented 4th which occurs in the scale of D major. We write first:—

Fig. 14.



and then, by testing each of the lower notes of these seven 4ths as a key-note, we find that the only augmented 4th is the one marked, viz., G to C♯.

Hint IV.—In all exercises on intervals, the golden rule to remember is that *the major scale is the standard of measurement for finding both the numerical and qualifying names of an interval;* but the student is strongly advised to learn *by ear* the effects produced by the different qualities of intervals.

36. The **mental effects of the various degrees of the major scale** may be thus familiarly described:—

Upper Tonic	8	The "*home* tone," *i.e.*, note of finality (melodically inactive).
Leading-note	7	The "*ascending* tone," *i.e.*, it rises or leads up to the Tonic.
Sub-mediant	6	The "*dull-quiet* tone." Has a *mild* tendency to fall to the 5th.
Dominant	5	The "*bright* tone" (melodically inactive).
Sub-dominant	4	The "*dull* tone." Has a *strong* tendency to *fall* to the 3rd.
Mediant	3	The "*calm* tone" (melodically inactive).
Super-tonic	2	The "*falling* tone," *i.e.*, falls to the Tonic *at the end*, but may equally well rise to the 3rd.
Tonic	1	The "*home* tone," *i.e.*, note of finality (melodically inactive).

37. The **mental effects of the degrees of the Harmonic Minor Scale** are identical with those of the Major Scale, except for the *Mediant* and *Sub-mediant.*

Sub-mediant (Flattened Sixth Degree), ♭6. Has an *imperative desire* to fall to the Dominant.

Mediant (Flattened Third Degree), ♭3. Has a *sad, melancholy effect* (melodically inactive).

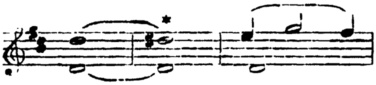
38. A **Simple** interval is one which does not exceed the compass of an 8ve. A **Compound** interval is one which has a wider compass than an 8ve.

39. The only compound intervals which are practically considered as such, are the **augmented 8ve**, the **doubly augmented 8ve**, the **major and minor 9th**, and sometimes the **perfect 11th**, and the **major and minor 13th.**

40. The **augmented 8ve** is obtained from a perfect 8ve either by raising the upper note a semitone, as in Fig. 15,

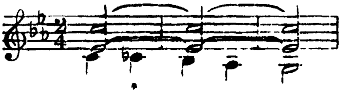
Fig. 15.

MOZART: Overture *Don Juan.*



or, by lowering the bottom note a semitone, as in Fig. 16;

Fig. 16.

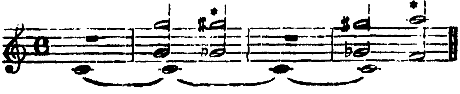


An augmented unison or octave is a discord of such intense harshness as to be very seldom used, and then only *transiently*, as shown in Figs. 15 and 16.

41. A **doubly augmented octave** (as from G♭ to G♯) is, however, used with good effect in modern music. This interval is merely the expansion of a perfect octave, by sharpening its upper note, and flattening its lower note; that is to say, each note is moved a semitone *outwards*, towards a major 3rd (or 10th), such as F, A. See Fig. 17:

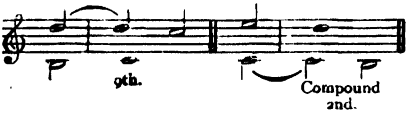
Fig. 17.

GOUNOD: *Redemption.*



42. The 9th (both major and minor) is always regarded in harmony as a compound interval. *It is distinguished from* a compound 2nd *by the interval which follows.* A 9th is followed by an 8ve; a compound 2nd is followed by a compound 3rd:

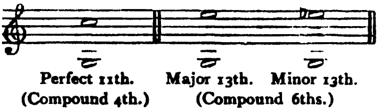
Fig. 18.



In the 9th, the *upper* of the two notes is the discord; in the compound 2nd, the *lower* note is the discord.

43. Sometimes, the **perfect 11th** and **major and minor 13th** are considered as intervals on their own account, but more often they are regarded as compound 4ths and 6ths:

Fig. 19.



With the exceptions just named, compound intervals are generally considered as simple, although they may include an 8ve (or several 8ves) in their compass. Thus, any E or G would be considered as a 3rd or as a 5th above C, no matter how wide the distance might be between the C and the E or G above it.

CHAPTER III.

TRIADS, AND TERMS USED IN HARMONY IN CONNECTION THEREWITH.

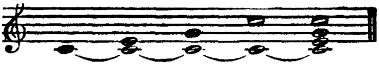
44. A **Chord** is the sounding together of several tones belonging to one particular (major, minor, or chromatic) scale. A chord may consist of two, three, four, five, or more tones sounded together.

45. The **lowest tone** of every chord is always called its **Bass**, or **Bass-note**.

46. The **upper tones** are called **the** *intervals of the chord.*

The **intervals of a chord** are all reckoned from the Bass upwards, so:—

Fig. 20.



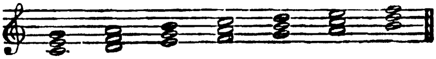
Bass. 3rd. 5th. 8ve. Chord.

47. Chords may be either **consonant** or **dissonant.** A **Consonant chord** cannot contain more than three tones bearing different alphabetical names. Its upper tones are both consonant with the Bass, and with each other. A **Dissonant chord** contains either (*a*) *more* than three notes bearing different alphabetical names, or (*b*) some upper tone which is dissonant with the Bass, or with a companion upper tone.

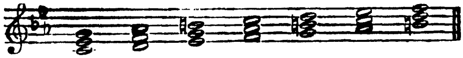
48. A **Triad** is a chord which consists of three notes bearing different alphabetical names. It may have any note of the scale for its Bass. Its intervals are the 3rd and 5th of the Bass, according to the scale:—

Fig. 21.

Triads of the Major Scale.

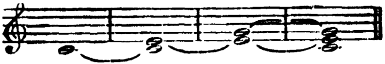


Triads of the Minor Scale.



49. The Bass-note of a Triad is also called its **Root.** The **Root** is the fundamental tone which gives its name to the Triad of which it forms the Bass. Upon the Root the triad is *built*, as it were, by adding 3rds one above the other, so that the upper note of the lower 3rd is the lower note of the upper 3rd:—

Fig. 22.



Root. Lower 3rd. Upper 3rd. Triad.

In his **First Exercises on Triads**, the student should:—

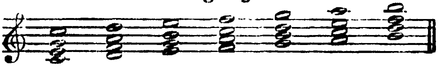
(i.) write a clef (Treble, Alto, Tenor, or Bass) and add a key-signature; then,

(ii.) take any note of the major or *harmonic* minor scale, and write a triad *above* it; and lastly,

(iii.) write a triad *below* any degree of the major or harmonic minor scales, using that degree as the 5th from the root. In doing this, he should remember that the leading-note of the minor scale always requires an accidental. If the root be on a *line* of the staff, the two upper notes will be on successive lines above. If the root be in a *space*, the two upper notes will be in the two successive spaces above.

50. Very often the root appears as one of the upper intervals of a triad, as well as being the Bass-note. The root when it thus appears twice in the same triad is said to be **doubled.** The root is generally the **best note to double.**

Fig. 23.

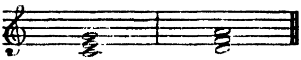


51. A **Triad,** according to the character of its intervals, is either Consonant or Dissonant.

52. A **Consonant Triad** is one which has a perfect 5th, and either a major or a minor 3rd. A consonant triad is free **and independent** in its progression to the next chord. "**Common Chord**" is another name for a consonant triad. Every common chord is a triad; but only *consonant* triads are called "common chords."

53. A common chord is **major** or **minor** according as its 3rd is major or minor:—

Fig. 24.



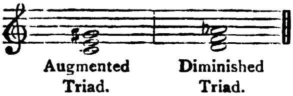
Major Triad or Common Chord. **Minor Triad or Common Chord.**

The qualifying name of the 3rd gives its name to the common chord.

54. A **Dissonant Triad** is one which has a dissonant 5th, *i.e.*, an augmented or a diminished 5th.

The qualifying name of the 5th gives its name to the dissonant triad.

Fig. 25.



55. An **Augmented Triad** is the result of a *major* triad having its perfect 5th *raised* a chromatic semitone. It consists of two *major* 3rds, one above the other.

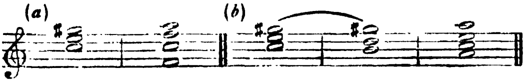
56. A **Diminished Triad** is the result of a *minor* triad having its perfect 5th *lowered* a chromatic semitone. It consists of two *minor* 3rds, one above the other.

57. A **Dissonant Triad is restricted and dependent** in its progression to the next chord. It requires what is called **resolution.**

58. **Resolution** is the passing from a dissonant chord to a consonant one, in such a way as to satisfy the ear. Dissonance produces a mental effect of *restless activity*; consonance conveys the idea of *rest.* Resolution is the passing from an effect of activity to one of rest.

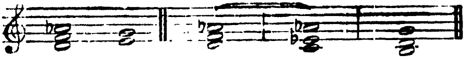
59. The 5th in an *augmented* triad is "resolved" either (*a*) by passing *upwards* to a note in the next chord, or (*b*) by remaining stationary :—

Fig. 26.



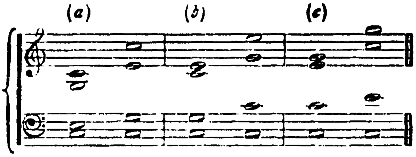
60. The 5th in a diminished triad is "resolved" either (*a*) by passing *downwards* to a note in the next chord, or (*b*) by remaining stationary :—

Fig. 27.



61. **Different positions of a triad.**—It is unnecessary for either the 5th or the doubled root always to be heard as the highest note. As any one of the three different tones of a triad may be placed in the top or Treble part, three different positions of the chord are available. They are here given :—(*a*) With the 8ve at the top ; (*b*) with the 3rd at the top (*c*) with the 5th at the top.

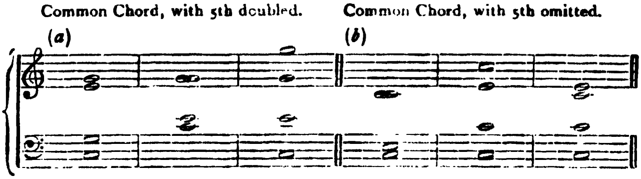
Fig. 28.



It will be seen from Fig. 28, that in triads the 3rd is not always next to the Bass, nor is the 5th always above the 3rd.

62. **The next best tone to double in a Major Common Chord.**—Sometimes in the course of an Exercise, it is, for various reasons, inconvenient or even impossible to double the root of a major common chord. In such a case, the 5th of the root is the best tone to double—see Fig. 29 (*a*)—but where this also is impracticable, the 3rd may be doubled. Frequently, too, it becomes necessary to omit the 5th in a common chord ; in which case the root is doubled twice, *but the 3rd must never be omitted*—see Fig. 29 (*b*).

Fig. 29.


Common Chord, with 5th doubled.
(a)
Common Chord, with 5th omitted.
(b)

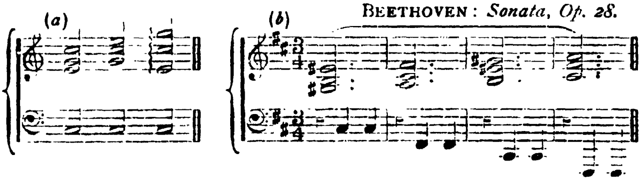
The root is the best tone to double, because the 8ve conveys to the ear notions of *identity* and *strength*. The interval of the 5th has a hollow, empty sound, which conveys to the ear the idea of *separation*. Each of the tones which form a 5th can be heard separately when they are sounded together; they do not blend as completely as the two tones which form an 8ve. Hence, a common chord does not sound so well, when the 5th is doubled instead of the root. The 3rd cannot be omitted with good effect, because it conveys to the ear an idea of *unity*; it binds the root and 5th together, and *qualifies* the triad, either as major or minor. Being such an important interval, ***the major 3rd cannot, as a rule, be doubled with good effect***—it becomes too prominent.

63. The 3rd in minor and dissonant triads can often be doubled with even better effect than the root.

64. **The Leading-note**, whether as the 3rd or as the 5th of a triad, **must never be doubled.**

65. In pianoforte music, chords are said to be written in **Close harmony** when the three upper tones are placed close together, so as to be played by the right hand, while the left hand plays the Bass only, as in Fig. 30:

Fig. 30. **Close Harmony.**

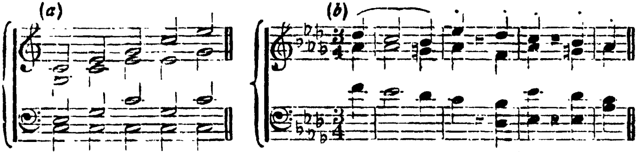


BEETHOVEN: *Sonata, Op. 28.*

66. Chords are said to be written in **Extended harmony** when all the tones lie at nearly equal distances apart. If there *must* be a wide interval between any two tones, it should come between the Bass and the tone next above the Bass, as in Fig. 31:—

Fig. 31. **Extended Harmony.**

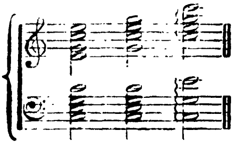
BEETHOVEN: *Sonata, Op. 27, No. 2.*



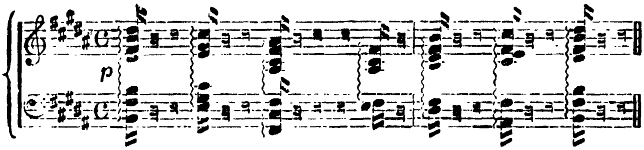
Exercises intended to be sung by voices have to be written in extended harmony, in order to bring the parts within easy compass for the four voices of a choir. See § 14.

67. Chords are said to be written in **Full harmony** when as many tones as possible are assigned to each hand of the pianoforte player :—

Fig. 32. **Full Harmony.**



MENDELSSOHN : *Rondo Brillante.*



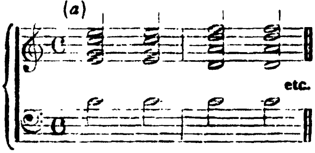
When chords are written in full harmony, if the Bass be rather low, the tone next above is usually not closer to the Bass than a perfect 5th.

68. **Arpeggios.**—A chord may be performed in two ways without losing its identity :—

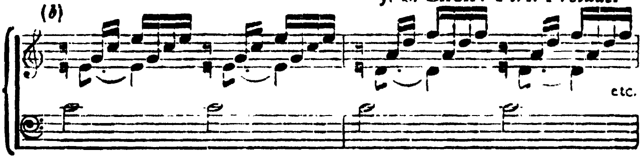
(i.) *Harmonically*, *i.e.*, by sounding its intervals *together*, at the same instant, in a *vertical* manner, as in Fig. 33 (*a*).

(ii.) *Melodically*, *i.e.*, by sounding its intervals *separately*, one after another, in a *horizontal* manner, as in Fig. 33 (*b*).

Fig. 33.



J. S. BACH : *First Prelude.*



A chord sounded melodically is said to be **broken**, or in **arpeggio**.

Arpeggio Chords are largely used for purposes of accompaniment, in all cases where sustained part-writing would produce an effect of heaviness or stiffness. They are also commonly found in music written exclusively for the pianoforte or harp—stringed instruments which lack sustaining power in a greater or less degree. See Chapter XIII. for further instruction on the analysis of Arpeggios in pianoforte music.

69. When a part moves to another interval of the same chord, that interval is called a **Bye-tone**. Very frequently (as in Fig. 34) one or more of the upper parts may move in this way from one interval to another of the same chord, while the Bass (and perhaps one or more of the other parts also) may remain stationary.

Fig. 34.

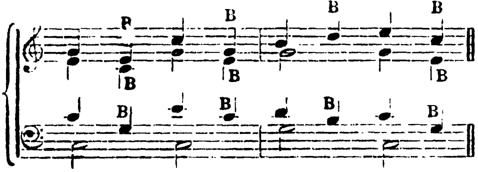
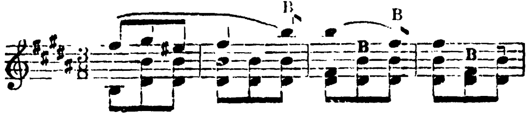


Fig. 35.

SCHUBERT: *Sonata, Op. 147.*



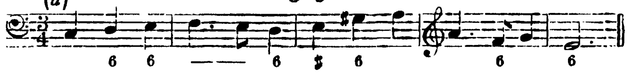
In Figs. 34 and 35 the capital letter B indicates the use of a bye-tone.

Bye-tones may be classed as a partial application of the principle of arpeggio. They cannot be used in the *Bass*, because there they would entirely change the name and nature of the chord. See § 135, page 54. They are *desirable* and *effective* when motion is needed in the **upper parts, without bringing any foreign or discordant element into the prevailing harmony.**

70. **Figured Bass** is a means of denoting the various chords used in Harmony by the use of figures, accidentals, and other signs, which will be explained later on. These are marked over or under the Bass part. Thus, a figured Bass consisting of single notes :—

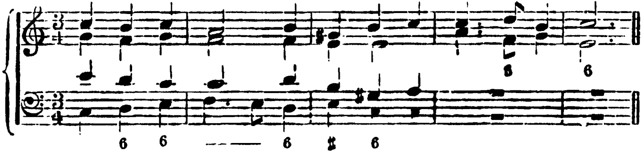
Fig. 36.

(*a*)



may be used to denote the following harmonies :—

(*b*)



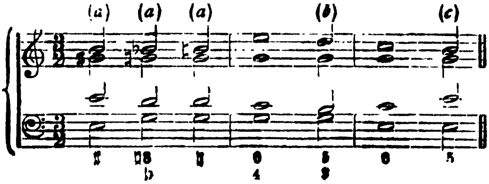
The terms **Thorough Bass** and **Basso Continuo** both mean the same as **Figured Bass.** The *Thorough* Bass is the Bass which is *continued through* the composition, always meaning the lowest tones of the chords, quite irrespective of pitch. Thus, if the Bass voice leaves off singing, as in bar 3 of Fig. 36 (*b*), the Tenor part becomes the real Bass. When both Tenor and Bass voices are silent, the Alto is the real Bass, as in Fig. 36 (*b*), last two bars.

In Figured Bass exercises we do not indicate a triad by figures unless :—

(i.) The 3rd or 5th (or both) should require an accidental. When this applies to the 3rd, *the accidental* (♯, ×, ♭, ♭♭, or ♮) *is written without the figure* 3, as in Fig. 37 (*a*); or,

(ii.) The triad is used *after* a different chord upon the same Bass-note as $^{6}_{4}$ $^{5}_{3}$, or 6 5, as in Fig. 37 (*b*), (*c*).

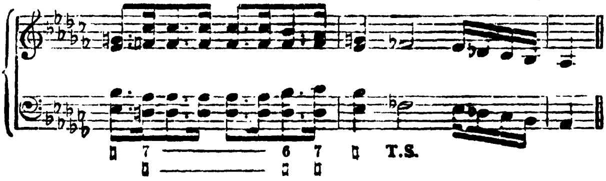
Fig. 37.



71. **Tasto Solo** (or T.S.) is in figured Basses written over or under those portions of the Bass which are intended to be played without the accompaniment of chords:—

Fig. 38.

BEETHOVEN: *Sonata in A♭, Op. 26.*



CHAPTER IV.

THE TONAL RELATIONSHIP OF TRIADS IN THE MAJOR, MINOR, AND CHROMATIC SCALES.

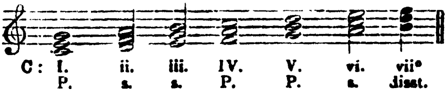
72. If we take the progressive degrees of any **major scale**, and add above each degree the intervals of a 3rd and 5th according to the scale, we obtain:—

(i.) On the I., IV., and V. degrees, *Major Common Chords.* These are known as the **Three Primary Triads.**

(ii.) On the II., III., and VI. degrees, *Minor Common Chords.* These are known as the **Three Secondary Triads.**

(iii.) On the VII. degree a *Diminished Triad.* This is the **Single Dissonant Triad** connected with the major scale.

Fig. 39.



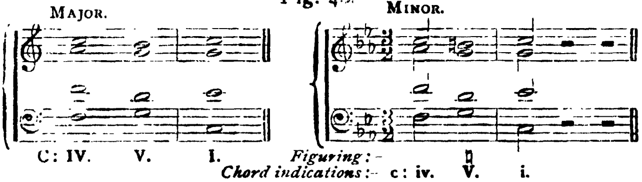
N.B.—What is stated here and elsewhere with respect to the Key of C (major and minor), must be relatively applied to every other major and minor key.

73. **For purposes of analysis**, a *large* initial letter (as C :) placed below the clef indicates that the chords belong

to the *major* key indicated by that letter. A *small* letter (as c :) signifies a *minor* key. The Roman numerals denote the chords built upon the corresponding degrees of the scale. A *large* numeral denotes a major triad, a *small* numeral denotes a minor triad. 0 added to a small numeral denotes a diminished triad, as vii^0; ′ added to a large numeral denotes an augmented triad, as III′. In order to facilitate their recognition in this chapter, major triads are written as *semibreves*, minor triads as *minims*, dissonant triads as *crotchets*.

74. The **Primary Triads** are often met with (especially at the end of a piece of music) in the following order :—IV., V., I. (for minor keys—iv., V., i.).

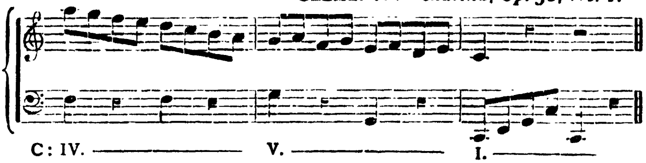
Fig. 40.



Sometimes these chords are not so clearly defined as they are in Fig. 40; but they are nevertheless implied by the two "parts" actually written and played in Fig. 41 :—

Fig. 41.

Clementi : *Sonatina, Op. 36, No. 1.*

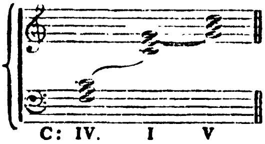


It will be observed that by using the three Primary Triads in this order, *all the degrees of the major scale are brought together into close contact.* A piece or movement ending with these three chords *must* belong to the particular key which is thus defined, and to no other, since chord IV. fixes the key-limit on the *flat* side, and chord V. fixes the key-limit on the *sharp* side.

75. The three **Primary Triads** can be thus shown to be related to one another: the highest note of IV. is the lowest

note of I., and, similarly, the highest note of I. is the lowest note of V. :—

Fig. 42.



Here is "a triad of triads":—

Chord IV. is the tonic chord of the sub-dominant key—the next key on the *flat* side—chord I. being a *passive* dominant to chord IV.

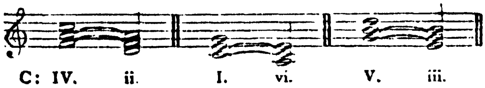
Chord V. is not only the tonic chord of the dominant key—the next key on the *sharp* side—but is also the *active* dominant to chord I.

The three **Primary Triads**—I., IV., V.—being major common chords, define their key *by establishing its major character*, and are therefore of primary importance.

76. The three **Secondary Triads**—ii., iii., vi.—although minor common chords, are closely related to the three Primary Triads, and to one another. The roots of the Secondary Triads lie a minor third below those of the Primary Triads. In this way Primary and Secondary Triads have the connection commonly known as **relative major and minor.** Thus :—

ii. is the relative minor triad of IV.
vi. „ „ „ „ I.
iii. „ „ „ „ V.

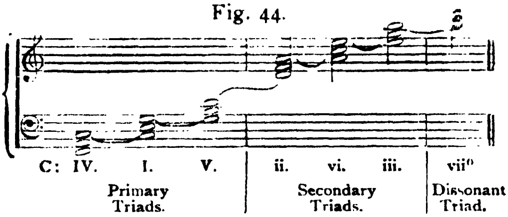
Fig. 43.



Each secondary triad has **two notes in common** with the primary triad with which it is thus relatively connected. It can therefore be often used as a **substitute** for that primary triad.

Secondary triads are also connected with primary triads in a regular successive order, inasmuch as the highest note of chord V is the lowest note of chord ii. :—

Fig. 44.



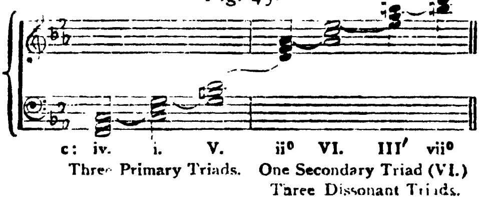
Like the primary triads, the secondary triads are "a triad of triads."

77. The **secondary triads** being minor common chords, contradict and oppose the prevalent major character of the key, of which they are heard and appreciated as subservient, **secondary**, and contrasted elements. The secondary triads do not disturb the major character of the key when they are judiciously mixed with primary triads. On the contrary, when so used, they impart a pleasing variety of delicate tonal shading to the harmonies of the major key.

78. The highest note of the secondary triad, iii., is the lowest note of the **dissonant triad**, vii⁰. This triad, vii⁰, like all other dissonant triads, is **very rarely used**, its effect being so harsh and unpleasant. The highest note of the dissonant triad, vii⁰, being the lowest note of the primary triad, IV., completes the **circle of triads** in a major key.

79. **In the minor key** the relationship of the triads may be thus shown :-

Fig. 45.



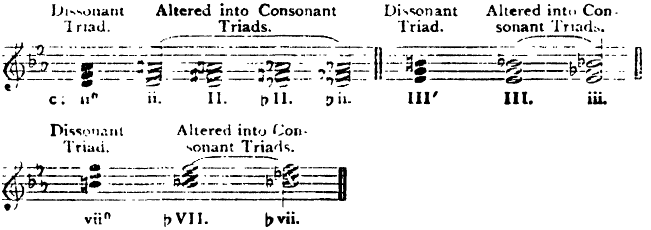
Of the three **primary triads in the minor key**, one the dominant triad, V.—is, as a rule, always major. Its 3rd, which is the leading-note of the scale, must therefore have an accidental (♮, ♯, or ×) prefixed to it. The other two—i. and iv.—are minor triads.

80. There is only **one** secondary triad in the minor key—the sub-mediant, VI.—which is **major.**

There are **three Dissonant triads in the minor key**, viz., the supertonic, ii^0; the mediant, III′; and the leading-note, vii^0. Of these, III′ is an *augmented* triad; the other two, ii^0 and vii^0, are *diminished* triads.

81. On account of their harshness, these three dissonant triads in the minor key are sometimes **made consonant** by one or more of their notes being **chromatically altered** :—

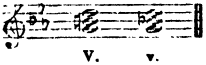
Fig. 46.



For purposes of analysis, a ♭, ♭♭ (or ♮, in sharp keys), placed before a numeral means that the scale-degree so indicated is *lowered a chromatic semitone*; similarly, a ♯, ×, (or ♮, in flat keys), placed before a numeral shows that a scale-degree is *raised a chromatic semitone.*

82. The **dominant chord**, V., of a minor key (except when it is used immediately before the tonic chord I.) is sometimes chromatically altered into a minor triad :—

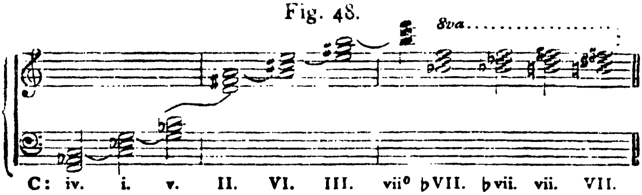
Fig. 47.



83. **Chromatic alteration of triads** is not confined to the minor key only. The three primary triads of the major

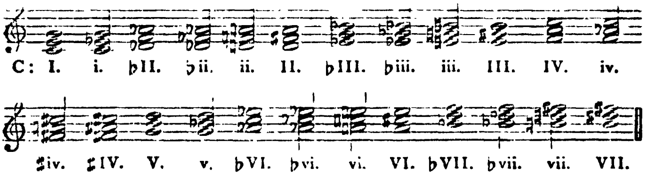
key may be chromatically altered into minor ones, the three secondary triads may be similarly converted into major ones; and the dissonant triad, vii⁰, may undergo the considerable chromatic alteration shown in Fig. 48.

Fig. 48.



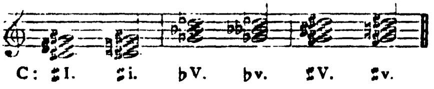
This process of alteration gives a major and a minor triad upon every note of the chromatic scale :—

Fig. 49. Chromatic triads in the Key of C.


C: I. i. ♭II. ♭ii. ii. II. ♭III. ♭iii. iii. III. IV. iv.
♯iv. ♯IV. V. v. ♭VI. ♭vi. vi. VI. ♭VII. ♭vii. vii. VII.

84. Enharmonic alteration of chromatic triads is also possible. For instance, ♭II. may be written with the enharmonic notation of a *raised tonic*; ♯IV. may be similarly treated as a *lowered dominant*, and ♭VI. as a *raised dominant* :—

Fig. 50.



85. This long list of chromatic triads is necessary for analytical purposes, since all the chords shown above are to be occasionally met with in modern compositions. It is always instructive to find out the diatonic origin of any chromatic triad which may present itself. This is done by discovering which primary, secondary, or dissonant triad has been altered, by the mere addition of "accidentals," into the given chromatic triad.

Strictly speaking, a key includes only seven different tones, viz., the seven alphabetical degrees of the diatonic scale (major or minor), which begins upon its tonic.

86. **A key is defined** or established by the use of its primary triads; it is opposed, contradicted, and shaded by the use of its secondary triads; it is coloured, contrasted, and varied by the **sparing use** of its chromatic triads and their enharmonic equivalents.

87. The **chromatic triads which are most often used** are those which have been altered by accidentals from dissonant and secondary triads.

88. Chromatic triads do not unduly disturb the key when they are judiciously mixed with diatonic triads.

89. The student will find during the course of his analytical exercises that tonic harmony (in some shape or other) is used shortly *before* the introduction of a chromatic triad, and that dominant harmony (in some shape or other) is used immediately *after* it—unless the chromatic triad is introduced as a means of leaving the original key by modulation.

90. **Notes best doubled in triads generally**:—

In all primary triads, double the root.

In all secondary triads, double the 3rd of the root; because this is one of the three chief scale-tones, viz., tonic, dominant, or sub-dominant.

In all diminished triads, double the 3rd of the root.

In all augmented triads, double the 3rd of the root.

In all chromatic triads, double either the tonic, dominant, or sub-dominant degrees of the scale, if one of these three chief scale-tones should happen to be in the chord. In the absence of all three chief tones, double the root of the chord.

CHAPTER V.

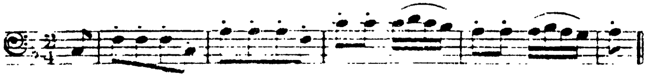
THE THREE DIMENSIONS OF MUSIC—PART-WRITING—AND TERMS, ETC., USED IN HARMONY IN CONNECTION THEREWITH.

91. Music is written, heard, and appreciated in three different ways, which are sometimes called **the three dimensions of music**:—

(i.) **Horizontal or successive.**—A succession of *single sounds*—read horizontally from left to right—is called **melody**. Music which consists of melody only, as Fig. 51, is said to be *one-dimensional* in character.

Fig. 51.

BEETHOVEN: *Presto—Sonata in F, Op. 10, No. 2.*

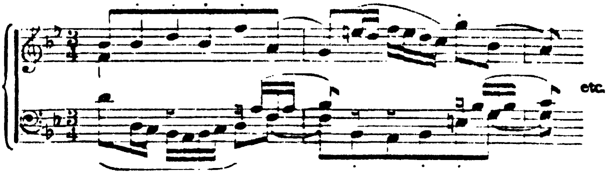


Many other examples of "one-dimensional" passages might be quoted from Beethoven's Sonatas. See, for example, *Sonata 18* (First movement), bars 53 and 56, and 177 to 182; *Sonata 21* (Rondo), bars 23 to 30, *Sonata 23* (First movement), bars 45 to 50, etc.

(ii.) **Complex or interwoven.**—Music like Fig. 52, which consists of two or more different and *interwoven melodies*, each possessing a separate and individual horizontal interest of its own (apart from the general or *ensemble* effect), is called **Counterpoint** or **Polyphony**. Such music is *two-dimensional* in character. The process of interweaving melodies is called **Part-writing**.

Fig. 52.

J. S. BACH: *Fugue in B♭, Book I., No. 21.*

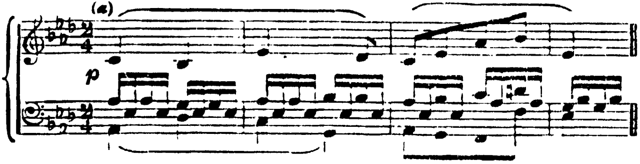


J. S. Bach's *Inventions* in two and three parts, supply magnificent examples of "two-dimensional" music.

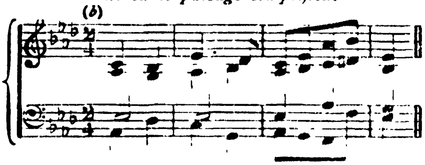
(iii.) **Perpendicular or simultaneous.**—This is called **Harmony**, which, in its narrowest sense, is the agreeable combination of single tones, read *perpendicularly*, from the bottom of the score to the top. In its widest sense it may be described as a well-ordered succession of agreeable tone-combinations, read from left to right. Music in which the interest largely depends upon *ensemble* effect, and which consists of several parts not all of equal melodic interest—so that all the tones sounding at the same instant at any given "beat" form an agreeable combination, if read perpendicularly—is ***three-dimensional*** in character.—

Fig. 53.

BEETHOVEN: *Sonata Pathétique, Op. 13.*



The same passage simplified.



Comparing (*a*) with (*b*) it will be seen at once that the middle (semiquaver) part of (*a*) is really a horizontal or arpeggio presentation of the Alto and Tenor parts of (*b*). These inner parts have little or no melodic interest of their own, but serve merely as an *accompaniment* to the principal (Treble) melody and its Bass.

92. A **Musical Sentence** or **Period** usually consists of eight bars, as Fig. 54.

93. A **Phrase** is half a sentence (four bars).

94. The first phrase of a sentence is called the **Fore-phrase.**

The second phrase of a sentence is called the **After-phrase.**

95. A **Section** (two bars) is half a phrase, or the quarter of a sentence or period.

Fig. 54.

A musical sentence (eight bars).

C. GURLITT: *Mignon, Op. 189, No. 3.*

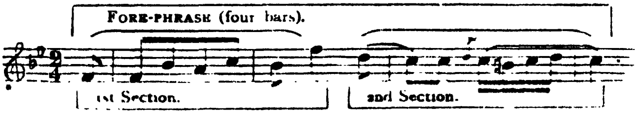
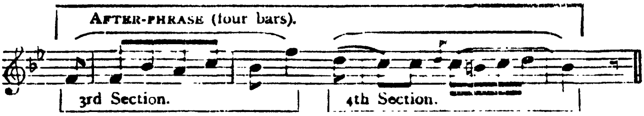


Fig. 54 (*continued*).



Here, with the exception of the last note, the melody of the After-phrase is identical with the Fore-phrase. This is exceptional. In the great majority of cases, the two phrases have not the same melody.

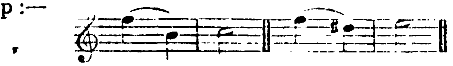
96. **Melodic progression** = The proceeding of a "part" or melody from one tone to the next.

97. **Step** = The melodic progression from one tone to another next to it in the scale or key.

98 **Skip** or **Leap** = The melodic progression by any interval greater than a *major* 2nd. An augmented 2nd is regarded more as a *skip* than as a step.

99. **Harsh melodic intervals.**—Any melodic skip or leap which is a discord, if the two notes are sounded together.

100. **Augmented intervals** being not easy to sing should generally be avoided, except in music of a dramatic character intended to depict violent emotion. A **diminished interval** may be used, if the melody returns to a note within the skip or leap:—



101. A **Part**, being a mere melody, is read *horizontally*, from left to right, as a line of words is read from the page of an ordinary book.

A **Chord**, being a combination of sounds, is read *perpendicularly*, from bottom to top, as a column of figures is read from the page of an account book, when the total amount has to be calculated.

102. Harmony, then, must be regarded from a three-fold aspect:—

(i.) As the art of accompanying a given Melody.
(ii.) As the art of Part-writing.
(iii.) As the art of Chord-making.

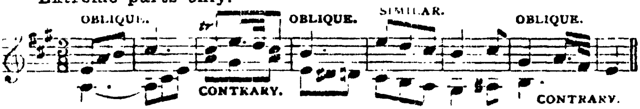
The two operations of Part-writing and Chord-making are inseparable. No three or four parts can be sung or played together without producing a succession of chords; and, *vice versâ*, no two chords can be struck successively without causing three or four distinct and different motions of parts.

103. **Motions of parts.**—Parts may move (i.) in the same direction; (ii.) in the opposite direction; and (iii.) one or more parts may remain stationary whilst the others move. (i.) is called **similar** motion; (ii.) **contrary** motion; (iii.) **oblique** motion.

Fig. 55.

BEETHOVEN: *Symphony in D, No. 2.*

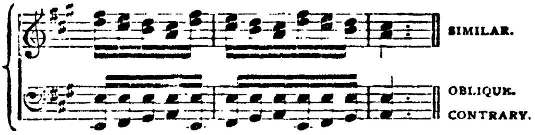
Extreme parts only.



The next example will show how all three motions can be combined in one short passage:—

Fig. 56.

From the same movement.

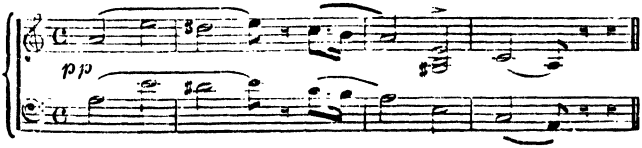


Of these three different methods of moving parts, similar motion is obviously the least interesting, and should therefore be combined with either contrary or oblique motion, or both. A judicious use of all three motions is generally to be found in the best music.

104. Sometimes an *entire phrase* is played (or sung) by two or more parts in the same or in a different pitch, for the purpose of gaining an intended and devised prominence for that phrase. This is called **doubling a part**, or playing (or singing) **in unison**.

Fig. 57.

SCHUBERT: *Sonata in A minor, Op. 143.*



A phrase so doubled in the octave or unison is only *one-dimensional.*

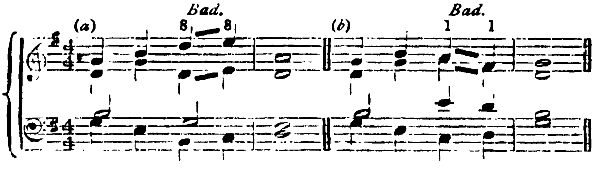
Such decided prominence given to any one phrase will be unnecessary and undesirable in *an exercise written for an examination*, because candidates are expected to write the simple chord-progressions required of them in so many *different parts* (generally four). It is only permissible to double in 8ves two parts which make no claim to melodic difference, and are only *one-dimensional* in character, as in Fig. 57. When two parts move in 8ves together, the effect is to make those two parts undistinguishable from one another.

105. The ear feels that an *undue prominence* is temporarily given to the melody of any one part, when, in *only two* successive chords (and not in an entire phrase), another part moves in octaves or in unison with it. When this is the case, the harmony for the moment loses one of its distinct and different parts, and becomes impoverished in its general effect. To avoid this defect in part-writing, the following rule has been laid down :—

No two parts may proceed in octaves, or in unison with each other. See Fig. 58 (*a*), (*b*).

Fig. 58.

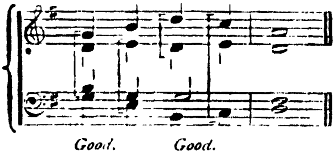
Consecutive Octaves. Consecutive Unisons.



106. Octaves are not consecutive when they occur between *different parts*, as in Fig. 59, where, for example, they come between Treble and Alto, Treble and Bass :—

Fig. 59.

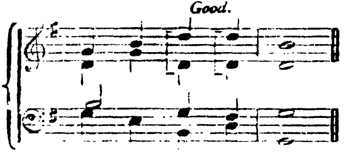
Octaves between different parts.



Octaves are also not consecutive when *two parts repeat* *the same octave*, as in Fig. 60, *i.e.*, when they do not alter their pitch by proceeding to the other notes of the scale.

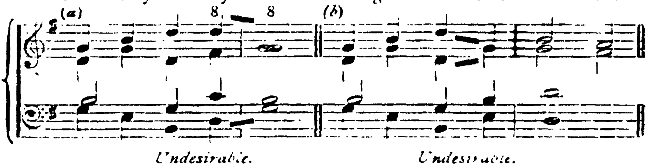
Fig. 60.

Repeated Octaves.



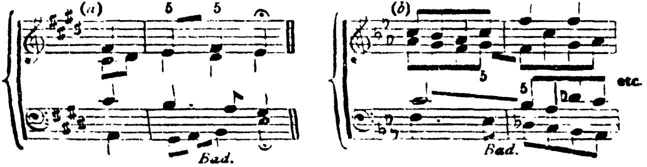
Consecutive octaves lose somewhat of their bad effect when they are taken by *contrary motion*, as in Fig. 61 (*a*), or when an octave proceeds to a unison, as in Fig. 61 (*b*), but an undue prominence is still felt to be given to the melody of the two parts so proceeding; and the examination candidate is advised *not* to indulge in such progressions.

Fig. 61.

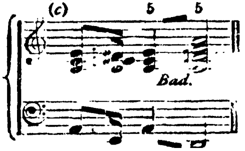

Octaves by contrary motion. Progression of octave to unison.

107. No two parts may proceed together in perfect 5ths either in similar or by contrary motion. See Fig. 62 (*a*), (*b*), (*c*).

Fig. 62.


Between extreme parts. Between inner parts.

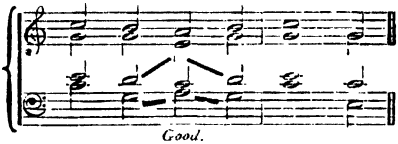
By contrary motion.



108. Fifths are not consecutive when they occur between *different parts*, as in Fig. 63, between Bass and Alto, Bass and Tenor :—

Fig. 63.

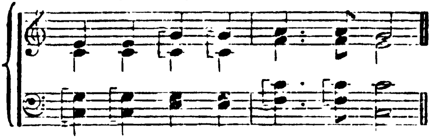
Between different parts.



Fifths are also not consecutive when *two parts repeat the same fifth*, as in Fig. 64, *i.e.*, when they do not alter their pitch by proceeding to other notes of the scale.

Fig. 64.

Good repeated 5ths.

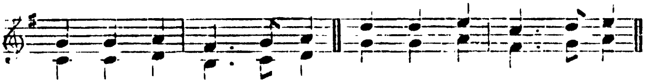


109. No melodic passage, however familiar, can be tolerated if it is doubled a fifth higher or lower :—

Fig. 65.

God save the King.

Doubled a 5th lower. Doubled a 5th higher.



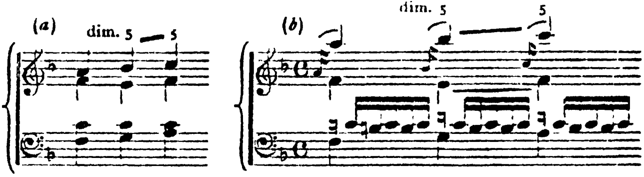
The effect of consecutive *perfect* 5ths upon the ear (as in Fig. 65) is insufferably *hard*. They cause the ear to lose its sense of harmonic *unity*. The perfect fifth has a strongly definite effect—harmonically separate, and melodically inactive. Consecutive *perfect* 5ths draw undue attention to the melodies they carry, and produce a confused sense of tonality; they sound as if two parts were simultaneously producing the same melody in different keys.

110. A perfect 5th may be followed by a diminished or imperfect 5th (or *vice versa*) between the same two parts, as

in Fig. 66. These are called **unequal consecutive 5ths**, and are allowed when the Bass is not one of the parts.

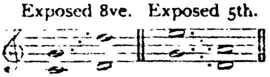
Fig. 66.

J. B. CRAMER: *Pianoforte Study, No. 33.*



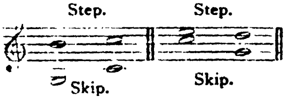
111. **Exposed 8ves and 5ths** occur when these intervals are exposed to undue prominence by being approached by similar motion between two parts:—

Fig. 67.



In this way, even a single 8ve or 5th has a tendency to obliterate the individuality of part progressions. The ear may be said to be puzzled in its attempt to distinguish distinctly separate movements when two parts approach an 8ve or 5th by *similar* motion, with a skip in the upper part, or in both of the parts. But when the upper part moves by a *step*, and the lower part moves by a *skip*, the individuality of the parts may be more clearly perceived by the ear. Fig. 68.

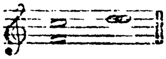
Fig. 68.



In some books, Exposed 8ves and 5ths are called **Hidden 8ves and 5ths.**

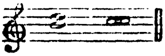
112. It is always bad for two parts to approach a unison by *similar motion.* When this happens, the ear is more puzzled than ever; since one of the parts seems to disappear altogether when the unison is reached.

Fig. 69.



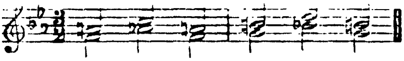
But when a unison is approached by *contrary motion*, the ear is able to distinguish the separate motion of each of the two parts :—

Fig. 70.



113. **False relation** is the term applied to the bad effect which is experienced, when, in two successive chords a note appears in two different parts at a different pitch, *i.e.*, ♮ in one of the parts, and ♯ or ♭ in the other part :

Fig. 71.



But this is bad only when the accidentally changed note belongs to a different key to that in which the unchanged note was used. The ear is then deceived and confused by two parts apparently proceeding in different keys at the same time.

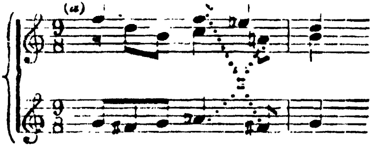
114. There is **no bad effect from False relation**:—

(*a*) When the key is not changed. Fig. 72 (*a*).

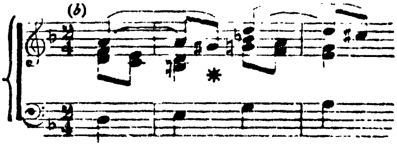
(*b*) When the chromatic alteration of a note occurs in two different parts between the end of one phrase and the beginning of another. Fig. 72 (*b*).

Fig. 72.

BEETHOVEN : *Sonata, Op. 31, No. 1.*



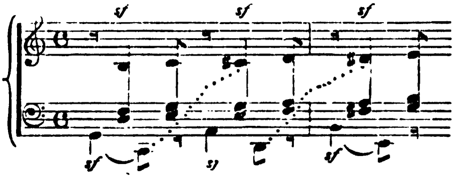
MENDELSSOHN : *Variations Serieuses.*



(*c*) When one of the two notes is *doubled*, so as to enable one of the parts to have the same note in both its original and altered pitch. Fig. 73.

Fig. 73.

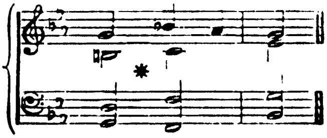
BEETHOVEN: *Sonata, Op. 14, No. 2.*



(*d*) When the second of the two notes is an appoggiatura. Fig. 74.

Fig. 74.

WAGNER: *Tannhäuser.*



CHAPTER VI.

CADENCES FORMED BY TRIADS IN ROOT-POSITION.

115. In Chapters III. and IV. we have studied harmony from its **perpendicular** aspect alone, viz., the building up of chords from the Bass by the simple process of adding notes one above the other.

We have now to give some attention to the **horizontal** aspect of harmony. This involves:—

(i.) The progression of one chord to another; and

(ii.) the proper horizontal movement of each of the four parts or voices which make up the chords.

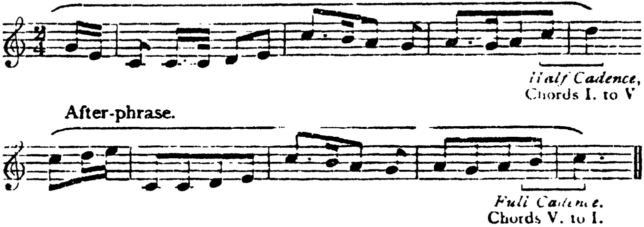
The simplest form of horizontal harmonic progression is that known as a **Cadence.**

116. The term **Cadence** signifies a **Close** or **Ending.**

Cadences are the musical equivalents of stops in ordinary literary composition; they are resting-places to mark the ends of the sections or phrases of a musical sentence:—

Fig. 75.

Fore-phrase. OLD SONG. *Oh, my love's like the red, red rose.*



The student is advised to play Fig. 75, supplying (with the left hand) the chords indicated for the Half and Full Cadences.

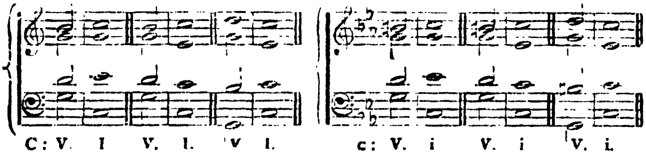
117. A cadence consists of two distinct chords, the second of which is usually more strongly accented than the first.

118. The following is a list of cadences in major and minor keys, which can be formed by triads in root-position, *i.e.*, with their roots in the Bass:—

(i.) Perfect Cadence, or Full Close: V. to I.: *or* V. to i.
(ii.) Plagal Cadence: IV. to I.: *or* iv. to i.
(iii.) Imperfect Cadence, or Half Close: I. to V.: *or* i. to V.
(iv.) Mixed Cadence: IV. to V.: *or* iv. to V.
(v.) Interrupted Cadence: V. to vi.: *or* V. to VI.

119. The Perfect Cadence (sometimes called Authentic) consists of the dominant chord, V., followed by that of the tonic, I., or i. The use of the perfect cadence is reserved for the end of a complete idea or sentence.

Fig. 76. Perfect Cadence.



120. Things to be remembered when writing a Perfect Cadence.

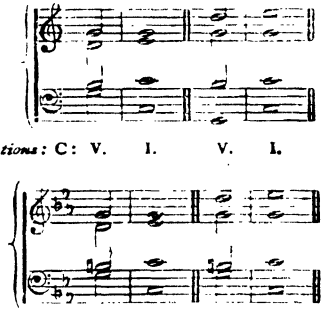
(i.) *Perpendicular conditions* :—

(1) In the minor key the leading-note requires an accidental.

(2) Chord I. has a more conclusive effect when the key-note is in the Treble, as in Fig. 76.

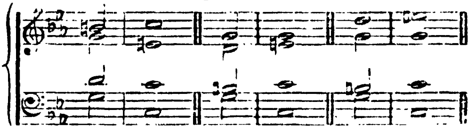
(3) For the sake of variety, and when a not too conclusive effect is required, the perfect cadence may sometimes end with the 5th or 3rd of chord I. in the Treble, as in Fig. 77 :—

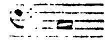
Fig. 77.


Chord indications : C : V. I. V. I.
Figuring : ♮ ♮
Chord indications : c : V. i. V. i.

(4) In the minor key, chord I. is frequently to be heard with a *major* 3rd (instead of a minor 3rd). This is called Tierce de Picardie.

Fig. 78.



(5) When the Bass of either chord is lower than C  do not write the 3rd of the chord in the Tenor part. It will be uncomfortably low for the Tenor voice, and will be also too close to the Bass to have a pleasant effect.

(ii.) *Horizontal conditions.*—

(1) The tonic chord, I., must be *more strongly accented* than the dominant chord, V.

(2) The Bass falls or rises from V. to I.

(3) *One* of the upper parts must always proceed from the leading-note to the tonic.

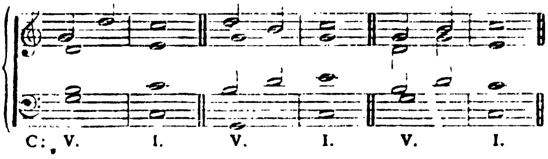
(4) Avoid consecutive octaves and fifths.

(5) Any note in one of the upper parts which belongs to both chords should not move; it should be held on (or repeated) in the same part in which it was first sounded.

(6) If a note of chord V. *cannot* be held on or repeated in chord I., it must move to that note in chord I. which is nearest to it in the scale.

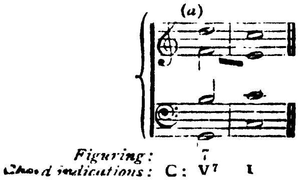
(7) The **dominant** chord may sometimes be written with **bye-tones** in one or more of the upper parts:—

Fig. 79.

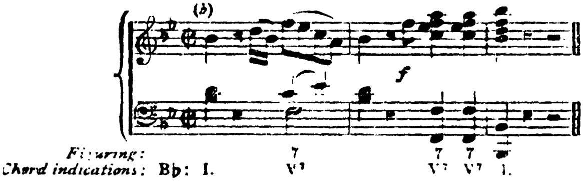


121. Sometimes, instead of doubling the root in one of the upper parts of chord V., the dissonant interval of a *minor* 7th from the Bass takes its place. The use of this discord turns chord V. into what is called a **dominant seventh** (a chord which will be explained in Chapter VIII.). All that the student need now remember is that if he uses a seventh from the Bass in chord V., he must make that discord proceed by a step downwards to the 3rd of the Bass in chord I. This is called **resolving the discord.**

Fig. 80.



MOZART: *Sonata in B flat.*



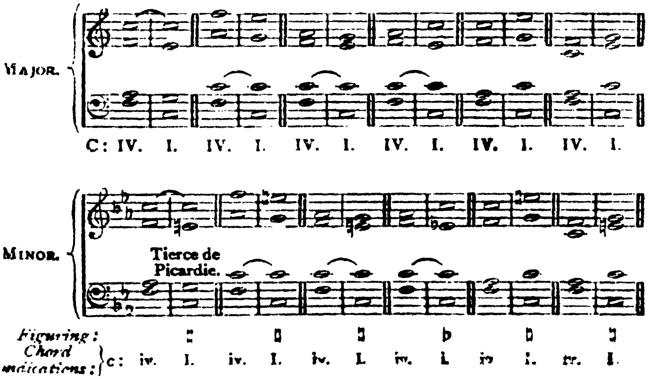
In figured **Bass** the dominant 7th is always figured 7 in a major key and $\overset{7}{\natural}$, $\overset{7}{\times}$, or $\overset{7}{\sharp}$ in a minor key.

122. **For purposes of analysis**, the chord of the dominant 7th is indicated thus :—V^7.

123. The addition of the 7th to the dominant triad, V., may be said to improve the *perpendicular* interest of the perfect cadence ; the resolution of the 7th on the 3rd of the tonic chord, I., increases the *horizontal* interest of the cadence.

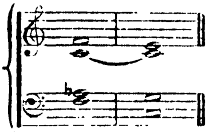
124. The **Plagal Cadence** consists of the sub-dominant triad, IV., followed by that of the tonic, I. It is very often used as a final cadence, because it affords a convenient means of prolonging the tonic note in the Treble part. But it is also frequently used in the middle portions of a musical sentence, with various upper parts, as shown in Fig. 81 :—

Fig. 81. **Plagal Cadence.**


MAJOR.
C: IV. I. IV. I. IV. I. IV. I. IV. I. IV. I.
MINOR.
Tierce de Picardie.
Figuring: ♮ ♮ ♮ ♭ ♮ ♮
Chord indications: c: iv. I. iv. I. iv. I. iv. I. iv. I. iv. I.

125. **Variations of the Plagal Cadence.** — In the **major key,** the 3rd of chord IV. is sometimes minor :—

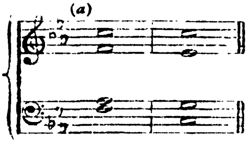
Fig. 82.



Figuring: ♭
Chord indications: C: iv. I.

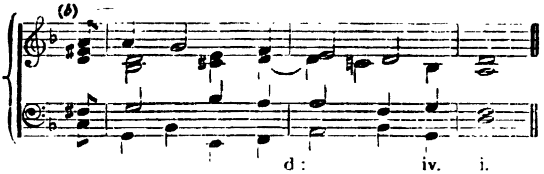
In the **minor key,** the 3rd of chord I. is most frequently major, as in the various examples in Fig. 81. Sometimes, however, when the key-note is the top part of *both* chords, the third of the final chord is minor :—

Fig. 82.



c: iv. i.

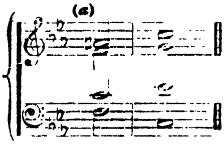
J. S. BACH: *Toccata and Fugue in D minor* (*Organ*).



Plagal Cadence.

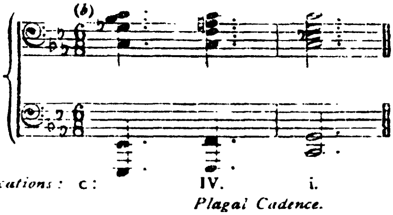
In modern music, the **Plagal Cadence** has sometimes a major 3rd in chord IV., and a minor 3rd in chord i. :—

Fig. 83.



Figuring: ♮
Chord indications: c: IV. i.

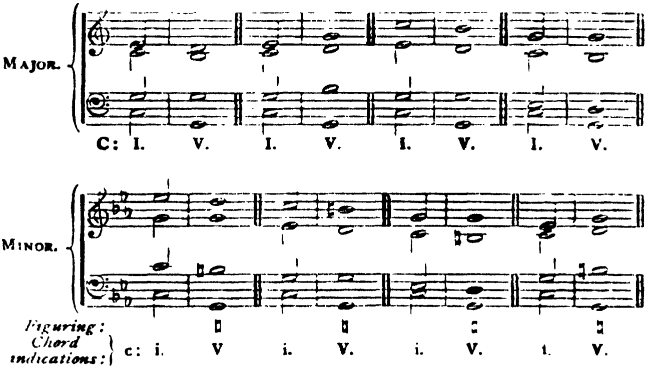
GRIEG: *Song, "Das Erst," Op. 43, No. 8.*



126. **When writing a Plagal Cadence,** the same things have to be remembered as with the perfect cadence, with this difference: the Bass rises or falls from IV. to I., instead of from V. to I. No accidentals are to be included in the plagal cadence unless they are asked for in the Figured Bass.

127. The **Imperfect Cadence** or **Half Close** consists of the tonic chord, I., followed by that of the dominant, V., *without an added 7th.* The imperfect cadence is generally met with at the end of the first phrase of a musical sentence. Its central position has gained for it the name of "half close." The following are examples of the Imperfect Cadence with varied upper parts :—

Fig. 84. **Imperfect Cadence.**

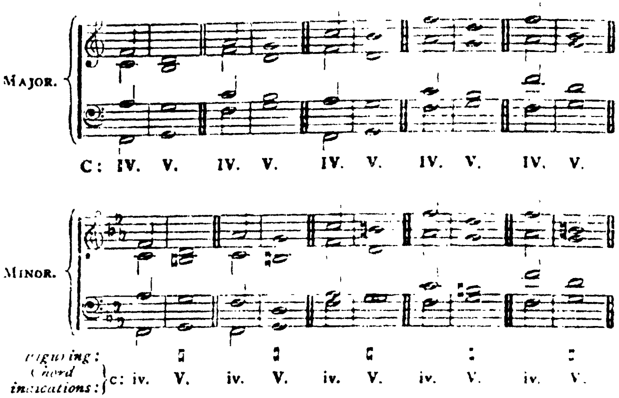

MAJOR.
C: I. V. I. V. I. V. I. V.
MINOR.
Figuring:
Chord indications: c: i. V i. V. i. V. i. V.

128. When writing an **Imperfect Cadence,** in addition to the previous instructions given in § 127, remember that the

Bass falls or rises from I. to V., and that in the minor key, the 3rd of chord V., *being the leading-note*, must always have an accidental prefixed to it.

129. The **Mixed Cadence** is another form of **Half Close**, used in the middle of a musical sentence. It consists of chord IV., followed by chord V. The following are examples of the Mixed Cadence, with different upper parts :—

Fig. 85. **Mixed Cadence.**


MAJOR.
C: IV. V. IV. V. IV. V. IV. V. IV. V.
MINOR.
Figuring:
Chord indications: c: iv. V. iv. V. iv. V. iv. V. iv. V.

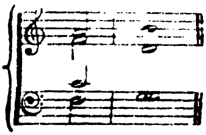
130. **Things to be remembered in writing a Mixed Cadence.**

(i.) Chords IV. and V. are **Disjunct triads**; that is, they have no note in common—no connecting link. Every part must *move*; no part can *remain*.

(ii.) Make *all* the upper parts move in **contrary motion to the Bass**, in order to avoid consecutive 8ves and 5ths.

(iii.) Do not allow the extreme parts to move together in major thirds :—

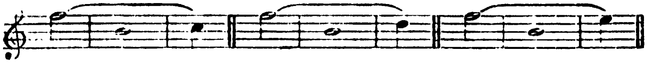
Fig. 86.



(iv.) Every note of chord IV. should move to that note of chord V. which is nearest to it in the scale.

(v.) The sub-dominant (when it is doubled in one of the upper parts) may skip down (not *up*) to the leading-note, as in Fig. 87. This produces an interval of a diminished 5th. *After* such an interval has been used in a mixed cadence, as in Fig. 87, the melody should, *in the next phrase*, return to a note between the sub-dominant and leading-note :—

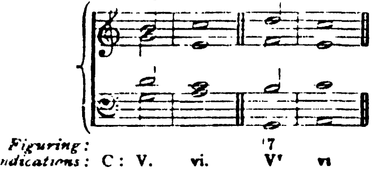
Fig. 87.



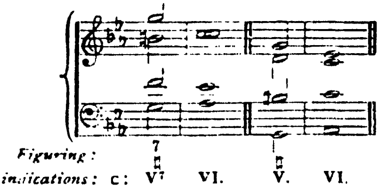
131. An **Interrupted Cadence** occurs when a passage has led the ear to expect a perfect cadence, and instead of this the dominant chord is followed by some chord other than that of the Tonic, I. The most common form of interrupted cadence consists of the dominant triad, V., or dominant seventh, V^7, followed by the secondary triad of the sub mediant, vi.

Fig. 88. **Interrupted Cadence**

MAJOR.



MINOR.



132. **Things to be remembered in writing an Interrupted Cadence.**

(i.) Chords V. and vi. (or VI) are **disjunct triads.**

(ii.) All the upper parts *except one* must move in contrary motion to the Bass. The single exception is the leading-note in chord V., which in whatever part it occurs must proceed to the tonic: this leading-note requires an accidental to be prefixed to it when used in a minor key.

(iii.) Chord vi. (or VI.) has its 3rd doubled, and the 8ve to the root is consequently omitted.

(iv.) If the 7th be added to the dominant chord, it must be **resolved** by going down to the 5th of chord vi. or VI.

133. **Other Cadences** not entirely consisting of *direct* chords will be found described elsewhere in this book. They are:—

Phrygian Cadence. See § 150.
Pathetic Cadence. See § 152.

CHAPTER VII.

INVERSIONS OF TRIADS.

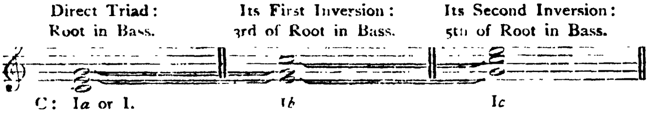
134. A chord is said to be **fundamental** or **direct** when its root is in the Bass.

135. A chord is said to be **inverted** when any one of its notes other than the root is in the Bass.

136. Every fundamental chord can have as many inversions as the number of notes it possesses in addition to its root.

137. A triad, having two notes other than its root, can have two inversions:—

Fig. 89.



138. Any one of the three notes of a triad may appear as the *top part* of either of the two inversions.

139. **How triads sound when inverted.**

Although a triad and its two inversions are composed of the *very same notes* (see Fig. 89), the three chords thus formed have certain peculiarities of effect.

A *Direct Triad* has a strong, restful, conclusive effect upon the ear, and is morever independent of what may come after it.

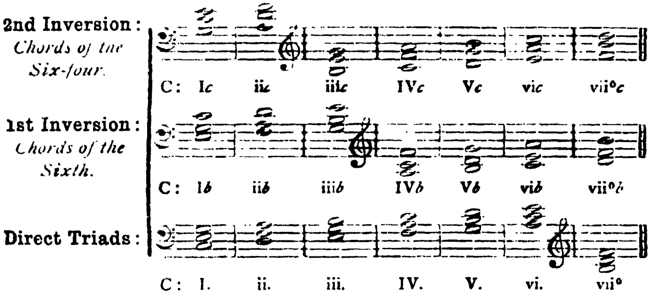
A *First Inversion* has a less strong, but still a *firm* effect. It is neither restful nor conclusive, and is rather dependent upon what may come after it.

A *Second Inversion* has a weak, restless, inconclusive effect, and is decidedly dependent upon what may precede and follow it.

140. **How inversions are indicated in analysis.**—A Roman numeral, with *no* small letter used after it, implies that the chord denoted by that numeral is *uninverted*, its root being in the Bass: the small letter *b*, used after the numeral, means that the chord is in its *First Inversion*, with the 3rd of the root in the Bass: the small letter *c*, similarly used, means that the chord is in its *Second Inversion*, with the 5th of the root in the Bass.

Sometimes a direct triad is indicated by a Roman numeral with a small letter *a* after it, as I*a*, ii*a*, etc. But a direct triad is more easily distinguished by the eye if its numeral be *used without the small letter*.

Fig. 90.


2nd Inversion:
Chords of the Six-four.
C: Ic iic iiic IVc Vc vic vii°c
1st Inversion:
Chords of the Sixth.
C: Ib iib iiib IVb Vb vib vii°b
Direct Triads:
C: I. ii. iii. IV. V. vi. vii°

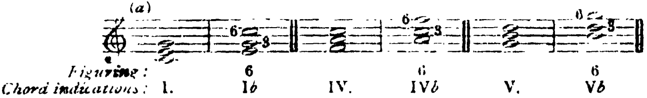
141. **How Inversions are figured in Thorough-Bass.**—In figured Bass, the upper notes of every chord are *reckoned from the Bass-note for the time being*, and not from

the root. Consequently the root must—in a First Inversion—be called a *6th above the new Bass-note*; and that note which was originally the 5th to the root, must now be called the *3rd to the Bass.*

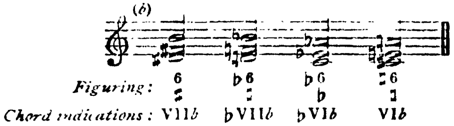
The First Inversion of a Common Chord is therefore called the **Chord of the Sixth,** and is figured 6; or, more fully, $^6_3$ with necessary accidentals when chromatic alterations are made, as in Fig. 91 (*b*). The 3rd is always *implied* when only 6 is marked.

Fig. 91.

Primary Triads with their First Inversions.



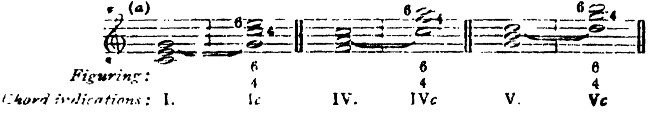
Chords of the 6th with accidentals.


(b)
Figuring: 6 ♯ ♭6 ♮ ♭6 ♭ ♮6 ♮
Chord indications: VIIb ♭VIIb ♭VIb VIb

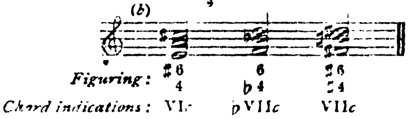
The Second Inversion of a Common Chord is called the **Chord of the Six-four,** and is always figured $^6_4$; necessary accidentals being used when chromatic alterations occur, as shown in Fig. 92 (*b*).

Fig. 92.

Primary Triads with their Second Inversions.



Chords of $^6_4$ with accidentals.


(b)
Figuring: ♯6 4 6 ♭4 ♯6 ♮4
Chord indications: VIc ♭VIIc VIIc

142. It is usual to employ **as few figures as possible** when figuring a Bass. The figure which has the highest numerical value occupies the highest place in the chord-figuring.

A direct triad is left unfigured, except in a few special cases :—

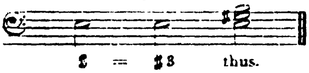
(i). When one or more of its notes need accidentals.

(ii.) When the $\frac{5}{3}$ displaces, or is followed by, a different chord on the same Bass-note.

143. When an accidental is needed, it is marked on the left side of the figure it affects, thus :—♯6, ♮6, ♭6.

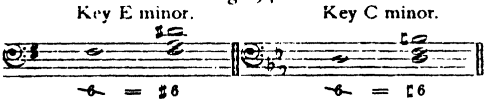
144. An *accidental standing alone*, under a note of a Figured Bass, refers to the 3rd above the Bass :—

Fig. 93.



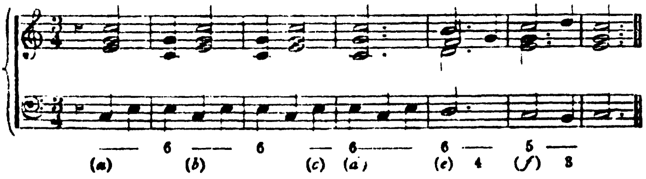
145. A *figure with a stroke through it* means that the note implied is to be raised a semitone, thus :—

Fig. 94.



146. A line of continuation is a horizontal stroke, sometimes used amongst the figuring. It means that a certain chord or a certain note (or notes) struck at the commencement of the line or stroke must be held on as long as the line lasts. The following examples will make this clear :—

Fig. 95.



(*a*) means that the $\frac{5}{3}$ on C is held as long as the line lasts.

(*b*) means exactly the same thing. *It is not a continuation of the 6th on E*, since there is a space between the figure 6 and the line.

(*c*) means the same as (*a*) or (*b*). It does not mean a $\frac{5}{3}$ on the second E, which would be written if the line were not there. It therefore means a continuation of the preceding chord.

(*d*) means that the chord struck at the beginning of the line is held to its end. Observe that the line begins *close to the right side of the figure* 6.

(*e*) means that B, the 6th of the Bass note D, is continued when G, the 4th of the Bass, is added.

(*f*) means that G, the 5th of C, is held on when D, the 3rd of B, is added. It does not mean a $\substack{5\\3}$ on B, which would in that case require no figuring at all.

147. **Rule for finding the root of a triad.**—Take the *full* figuring of the given chord, thus :—

Direct triad $\substack{8\\5\\3}$, First Inversion $\substack{6\\3}$, Second Inversion $\substack{6\\4}$. The root is always the note indicated by the *lowest even figure*, thus :—8 is the root of the direct triad ; 6 is the root of the first inversion ; 4 is the root of the second inversion.

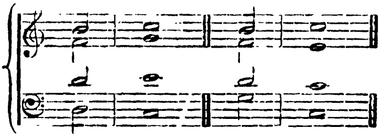
148. **Doubled Notes of First Inversions.**—In four-part harmony, when *Primary Triads* are used in their First Inversion, it is *best* to double the root, which is in this case the 6th to the Bass. The Bass-note (which is the major 3rd of the root) is the *worst* note to double.

When *Secondary Triads* are used in their First Inversion, it is best to double the Bass-note. This is because these Inversions have the three primary degrees of the scale—viz., the tonic, sub-dominant, and dominant—as their Bass-notes See Fig. 97 (*d*), (*e*), (*f*).

The **Dissonant Triad of the Leading-note** loses a great deal of its original harsh effect when used in its First Inversion. The chord of the 6th upon the super-tonic—which it then forms—is sometimes used instead of the Dominant Triad or Seventh (V. or V^7) in a Final Cadence :—

Fig. 96.

This is used :— instead of :—



Figuring: 6 7

Chord indications: C: vii^{o6} I V^7 I.

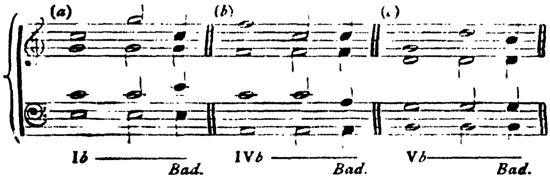
Fig. 97 shows which are the best and the worst notes to double in the First Inversions of triads belonging to the major key.

In Fig. 97 the chords written in *semibreves* show which note is the *best* to double; those written in *minims* show the *next best*; whilst those in *crotchets* show the *worst* doubled notes The root, however, is often doubled, instead of the Bass-note, in the First Inversions of Secondary Triads. See *minim* chords in Fig. 97 (*d*), (*e*), (*f*). Again, the 3rd or the Bass may be *freely doubled* with good effect in chords of the 6th generally See *minim* chords in Fig. 97 (*a*), (*b*), (*c*); and *crotchet* chords in Fig. 97, (*d*), (*e*) (*f*).

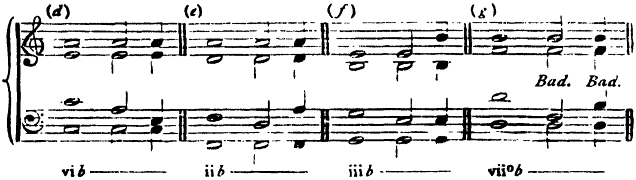
In the First Inversion of the dissonant triad of the leading-note (vii^0b), the 6th from the Bass cannot be doubled, because it is the leading note: Fig. 97 (*g*), *crotchet* chord. The 3rd of the chord being the 7th to the real dominant root (see §§ 166 and 167), and therefore an *implied discord*, should not be doubled: Fig. 97 (*g*), *minim* chord. Therefore, in a chord of the 6th upon the super-tonic, the Bass is the only note which can be doubled with really good effect. Fig. 97 (*g*), *semibreve* chord.

Fig. 97.

First Inversions of Primary Triads.



First Inversions of Secondary Triads. First Inversion of ^{0}vii.



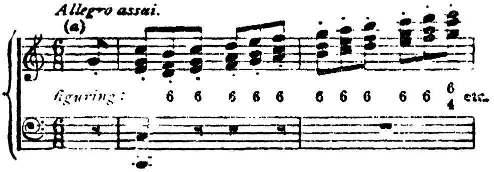
149. **Successions of First Inversions.**—Very often a composer will use the whole or a part of an ascending or descending scale as a Bass part, and will write a chord of the 6th over every note of this Bass. When this is so, **the 6ths are always placed in the highest part**, as, otherwise, consecutive 5ths would most certainly occur. See Fig. 98 (*a*), (*b*). When only two or three First Inversions

occur in succession it is generally best—for the same reason—*to write the 6ths at the top.*

Fig. 98.

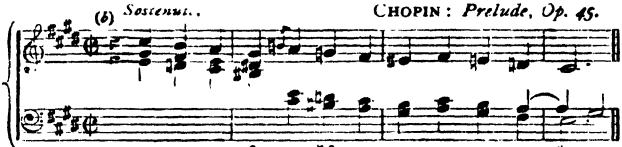
Ascending succession of First Inversions.

BEETHOVEN. *Sonata, Op. 2, No. 3.*



Descending succession of First Inversions.

CHOPIN: *Prelude, Op. 45.*



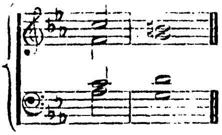
Figuring: 6 6 6 $\frac{6}{\sharp}$ 6 $\frac{\natural 6}{\natural}$ 6 ♯6 6 ♮6 ♮6 $\frac{6}{4}$ —

Chord indications: c♯: i*b* ♮vii*b* VI*b* V*b* VI*b* ♮V*b* iv*b* ♯iii°*b* iv*b* III*b* ♮II*b* VI*b* i*b*

150. Phrygian Cadence.—This a cadence (peculiar to the minor key) consisting of the First Inversion of the sub-dominant **chord** (iv*b*), followed by the dominant chord (V.).

Fig. 99.

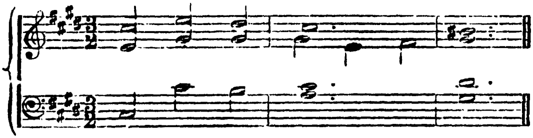
Phrygian Cadence.



Figuring. 6 ♮

Chord indications: c: iv*b* V.

HANDEL: *Largo of 12th Violin Sonata.*



Figuring: 6 7 5 6 ♯

Chord indications: c♯: i. i. iv*b* VI⁷ iv*b* V.

Phrygian Cadence.

The Phrygian Cadence is but another form of the Half Close or Imperfect Cadence in the minor key, being in fact a *Mixed* Cadence with the sub-dominant chord inverted—iv*b* to V., instead of iv. to V. See § 129.

151. **The Diatonic First Inversions most frequently used** are :—

(i.) *Major key* : IV*b*, I*b*, V*b*, ii*b*, vii°*b*.

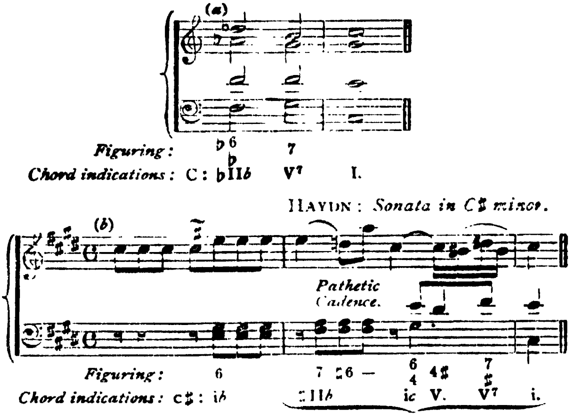
(ii.) *Minor key* : iv*b*, i*b*, V*b*, ii°*b*, vii°*b*.

152. The **Inversions of Chromatic Triads** are as sparingly used as are the direct chords themselves. The first inversion of the chromatic triad on the minor second of the key (viz., ♭II*b*) is called by the fancy name "Neapolitan 6th."

The **Neapolitan 6th** is frequently used immediately before a Perfect Cadence, to which it gives the name "Pathetic." A **Pathetic Cadence**, therefore, in its *simplest* form, consists of the three chords : ♭II*b*, V⁷, I. It can be used in both major and minor keys. See Fig. 100 (*a*), (*b*).

Fig. 100.

Pathetic Cadence.


(a)
Figuring: ♭6 ♭ 7
Chord indications: C : ♭II*b* V⁷ I.
HAYDN : *Sonata in C♯ minor.*
(b)
Pathetic Cadence.
Figuring: 6 7 ♮6 — 6 4 4♯ 7 ♯
Chord indications: c♯ : i*b* ♮II*b* i*c* V. V⁷ i.

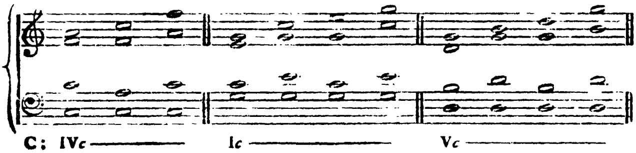
153. **The Second Inversions of Diatonic Triads most frequently used** are :—

(i.) *Major key* : IV*c*, I*c*, V*c*. (Second Inversions of Primary Triads.)

(ii.) *Minor key* : **iv*c*, i*c*, V*c*.** (Second Inversions of Primary Triads.)

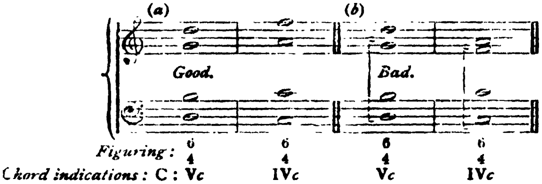
The best note to double in the Six-four chord is the Bass-note :—

Fig. 101.

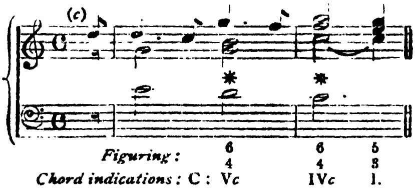


154. **Second Inversions are rarely used in Succession.**—Sometimes a $^6_4$ with the *super-tonic* as its Bass (V*c*) may be followed by another $^6_4$ with the *tonic* as its Bass (IV*c*): Fig. 102 (*a*), (*c*). This may happen in either major or minor keys. But the fourths of these chords should never occur in the same part, because **consecutive 4ths to the Bass** have a very bad effect upon the ear: Fig. 102 (*b*). They are, therefore, forbidden.

Fig. 102.

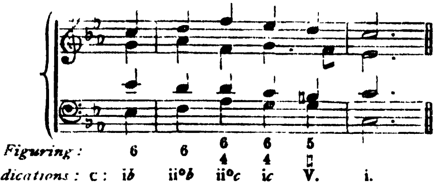


MOZART: "*Jupiter*" *Symphony.*



Sometimes too, a $^6_4$ chord on the sub-mediant of the minor key (ii°*c*) may be followed by another $^6_4$ on the dominant (i*c*). See Fig. 103.

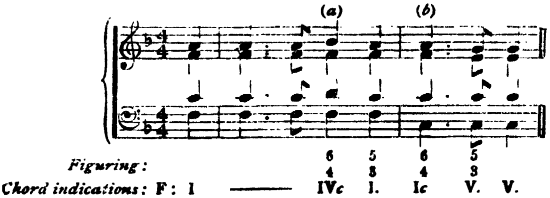
Fig. 103.



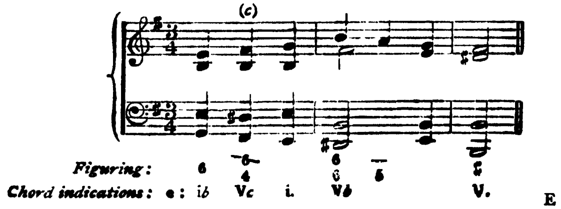
155. Treatment of Second Inversions.—Of the Second Inversions of the three Primary Triads, those of the tonic and sub-dominant (I*c*), (IV*c*), are generally used before a $^5_3$ on the same Bass-note—Fig. 104 (*a*), (*b*). When this is so, the 6th of the Bass goes to the 5th, and the 4th of the Bass goes to the 3rd. The Second Inversion of the *dominant* (V*c*) is never used in this way; it is generally used as a *chord of transition* between the tonic chord (I.) and its First Inversions (I*b*), or *vice versa*—Fig. 104 (*c*). This is sometimes called a Passing $^6_4$.

Fig. 104.

PEARSALL: *"O who will o'er the downs so free ?"*

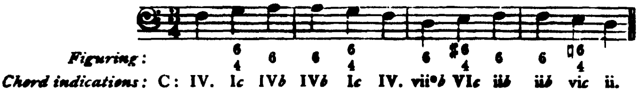


BEETHOVEN: *Sonata in E, Op. 14.*



The Second Inversions, I*c*, and both VI*c* and vi*c*, may also be used as passing $^6_4$ chords :—

Fig. 105. Passing Six-four Chords.

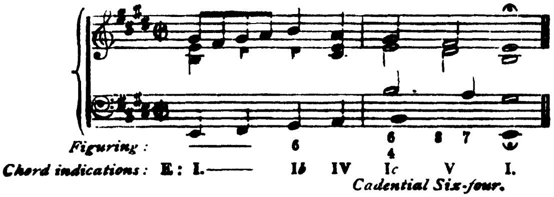

Figuring :
6/4 6 6 6/4 6 ♯6/4 6 6 ♮6/4
Chord indications : C : IV. I*c* IV*b* IV*b* I*c* IV. vii°*b* VI*c* ii*b* ii*b* vi*c* ii.

156. Rhythmical position of a Second Inversion.—The Six-four chord, when followed by a chord on the same Bass-note, or its octave, should always occur *upon a stronger accent* than the chord which follows it. See Fig. 104 (*a*), (*b*).

The progression I*c* to V. is the most agreeable and most frequently used form of **Imperfect Cadence or Half Close.** The chord I*c*, when used in this way, or immediately before a Perfect Cadence, as in Fig. 106, is called a **Cadential Six-four** :—

Fig. 106.

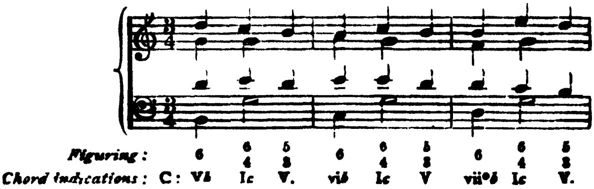
J. S. BACH : *Fugue in E major* (*No. 33 of the 48*).



157. How not to approach a Second Inversion.—The Bass-note of a $^6_4$ chord must not be approached by a leap from an inversion of a chord derived from *another* root :—

Fig. 107.

Badly approached Second Inversions.


Figuring :
6 6/4 5/3 6 6/4 5/3 6 6/4 5/3
Chord indications : C : V*b* I*c* V. vi*b* I*c* V vii°*b* I*c* V.

The Bass of a second inversion may, however, be approached by a leap from the first inversion of *its own root*, as in Fig. 103 (second and third chords).

158. **How to quit a Second Inversion.**—A $^6_4$ chord must be followed by a chord either :—

(*a*) on the same Bass-note or its octave—Fig. 104 (*a*), (*b*); or,

(*b*) on the Bass-note next above or below it—Fig. 104 (*c*).

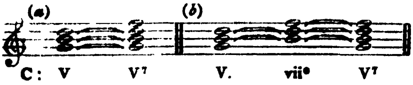
CHAPTER VIII.

THE CHORD OF THE DOMINANT 7TH AND ITS INVERSIONS.

159. We have already seen (in § 121) that the **chord of the Dominant 7th** (V^7) is formed by the addition to the dominant triad (V.) of a minor 7th from its root. See Fig. 108 (*a*).

The chord of the dominant 7th is in fact a **combination of the two triads V. and vii°.**

Fig. 108.



The **characteristic interval** of the chord is the diminished 5th, which lies between the major 3rd and minor 7th of the root.

160. **Constitution of the Dominant 7th.**—Observe that :—

(i.) The major 3rd from the root is the *leading-note*—the *sharpest* tone of the scale—which in the minor key requires an accidental.

(ii.) The minor 7th from the root is the *sub-dominant*—the *flattest* tone of the scale.

(iii.) The 7th is dissonant both with the root and the 3rd of the root.

(iv.) The three intervals above the root are: major 3rd, perfect 5th, minor 7th. No other diatonic chord of the 7th has the quality of its three upper intervals exactly the same as these.

161. The **effect of the Dominant 7th** (V^7) is very different to that of the dominant triad (V.). The addition of the minor 7th to the root vastly increases the *ruling power* of the dominant triad, and intensifies the *upward leading tendency* of its 3rd. The effect of the dominant 7th is one of great **unrest**. It *demands* rather than invites a more restful chord to follow it.

162. The progression from a chord of unrest to one more restful than itself is (as we already know) called **resolution.**

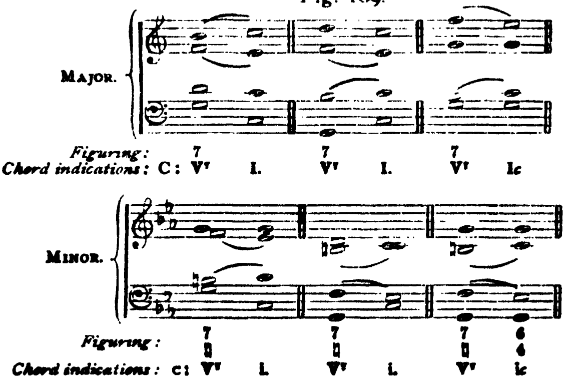
163. The **resolution of the dominant 7th** (V^7) most often takes place upon the **tonic triad** (I.). When this is so, **the following six things have to be remembered**:—

(i.) The 7th of the root (the sub-dominant of the scale) *falls* one degree to the 3rd of I. or i.

(ii.) The 3rd of the root (the leading-note of the scale) *rises* a semitone to the 8ve of I. or i.

(iii.) The root (the dominant of the scale) may *fall* a 5th, *rise* a 4th, or *remain* to be the Bass-note of the second inversion of the tonic triad I*c* or i*c*.

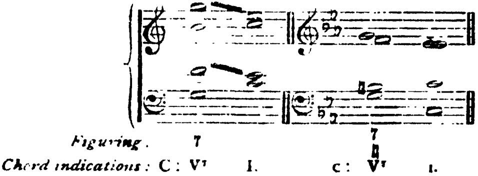
Fig. 109.


MAJOR.
Figuring: 7 7 7
Chord indications: C: V⁷ I. V⁷ I. V⁷ Ic
MINOR.
Figuring: 7 ♮ 7 ♮ 7 ♮ 6 4
Chord indications: c: V⁷ i. V⁷ i. V⁷ ic

(iv.) Neither the 3rd (leading-note) nor the 7th (discord) can be doubled, because both of these tones have fixed progressions. (§ 163—i., ii.)

(v.) No part can proceed by similar motion to the octave (or unison) of the note of resolution :—

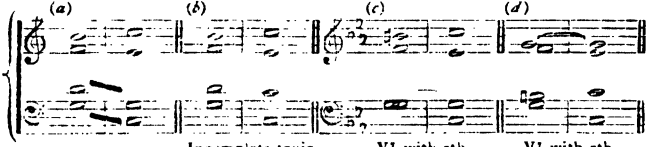
Fig. 110.



Such a progression causes the worst form of exposed octaves or unisons.

(vi.) *One* of the two chords must—in order to save consecutive 5ths—be written without the 5th of its root : Fig. 111 (*b*), (*c*), (*d*). It is *preferable* to omit the 5th from chord V^7 in order to secure completeness for the final harmony of chord I. or i. It will also often be found *convenient* to omit the 5th in chord V^7 and to use the 8ve of the root in its place, in order to gain a connecting link with chord I. or i. : Fig. 111 (*c*), (*d*).

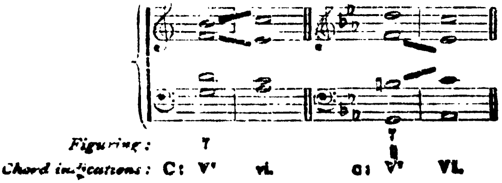
Fig. 111.



Consecutive 5ths. Incomplete tonic chord. V^7 with 5th omitted. V^7 with 5th omitted.

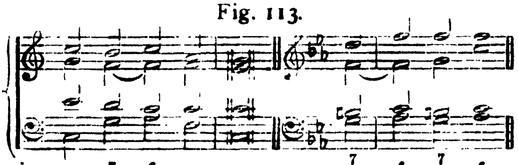
164. A second resolution of the Dominant 7th has been already described (§ 131), viz., in the *Interrupted Cadence*, where the secondary triad of the sub-mediant (vi. or VI.) takes the place of the tonic chord I. or i. Observe that the 3rd and 7th both proceed exactly as they do when V^7 is resolved upon I. or i.

Fig. 112.



165. **A third resolution of the Dominant 7th** is often to be found. The first inversion of the sub-dominant triad may be used after V^7, in which case the discord *remains* to be the root of IV*b* or iv*b*, as in Fig. 113:—

Fig. 113.

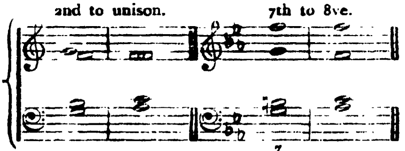


Figuring 7 6 7 ♮ 6 7 ♮ 6

Chord indications: C: V^7 IV*b* IV. I. c: V^7 iv*b* V^7 iv*b*

Here, care must be taken neither to allow a 2nd to proceed to a unison, nor a 7th to an 8ve, by oblique motion:—

Fig. 114.

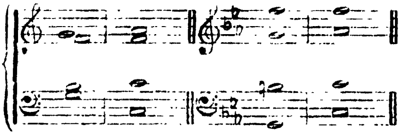


Figuring: 7 6 7 ♮ 6

Chord indications: C: V^7 IV*b* c: V^7 iv*b*

The dominant 7th may also be resolved upon the *second* inversion of the sub-dominant chord (IV*c* or iv*c*).

Fig. 115.



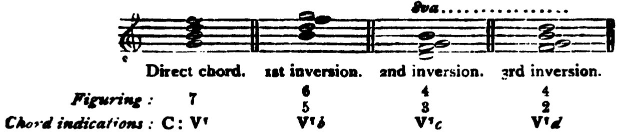
Figuring: 7 $\frac{6}{4}$ 7 ♮ $\frac{6}{4}$

Chord indications C: V^7 IV*c* c: V^7 iv*c*

In this case it will be found convenient in chord V^7 to always omit the 5th, and to double the root.

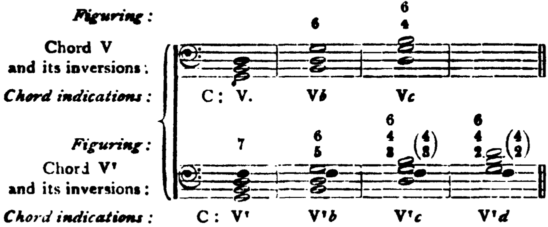
166. **Inversions of the Dominant 7th.**—The chord of the dominant 7th can be inverted—like the common chord—by the removal of its root from the Bass to a position at a higher pitch amongst the upper parts. The dominant 7th having three notes besides its root, has three inversions:—

Fig. 116



167. A comparison of the inversions of the dominant 7th with those of the dominant *triad*, may be helpful:—

Fig. 117.



The discord is here indicated by a black note.

From Fig. 117 it is clear that **uninverted** or **direct chords** are *two* in number:—$\substack{5\\3}$ (concord) and $\substack{7\\5\\3}$ (discord); **inverted chords** are *five* in number:—6 and $\substack{6\\4}$ (concords), $\substack{6\\5}$, $\substack{4\\3}$, and $\substack{4\\2}$ (discords). A **Root** may therefore be properly defined as the lowest tone of a $\substack{5\\3}$ or $\substack{7\\5\\3}$ chord.

168. How the Dominant 7th and its inversions are indicated in analysis.

The direct chord		is *indicated*		V⁷.
Its first inversion	,,	,,	,,	V⁷*b*.
,, second	,,	,,	,,	V⁷*c*.
,, third	,,	,,	,,	V⁷*d*.

169. In listening to the Dominant 7th and its inversions:—

In the direct chord observe the strong effect of the root in the Bass; and in the upper parts, listen especially for the double dissonance of the 7th against both the root and the leading-note.

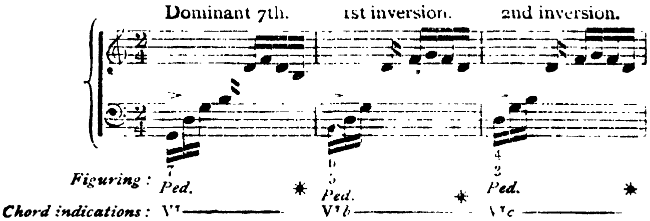
In the first inversion listen for the leading-note in the Bass and the discord as a diminished 5th above the Bass.

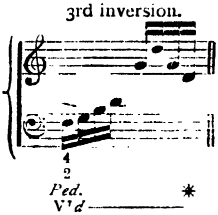
In the second inversion observe the weak effect of the root in one of the upper parts, and listen for the double dissonance of the 3rd of the chord against the 4th above the Bass and also against the leading-note

In the third inversion listen first for the dissonant effect of the Bass note and then listen for the leading-note as an augmented 4th above the Bass, and also for the root as a major 2nd above the Bass.

The chords should first be played in arpeggio, thus:—

Fig. 118





The student should observe that the lowest tone of a chord played in arpeggio is the Bass. In analysis this lowest tone carries the figuring and chord indication exactly as it does when the chord is played in the ordinary way.

170. How the Dominant 7th and its inversions are figured in Thorough-bass:—

Direct Chord.	1st Inversion.	2nd Inversion.	3rd Inversion.
"Dominant 7th."	"Six-five" chord.	"Four-three" chord.	"Four-two" chord.
7 *is discord.* (5) (3)	6 *is root.* 5 *is discord.* (3)	(6) 4 *is root.* 3 *is discord.*	(6) 4 2 *is root.* *Bass-note is discord*
In the minor key, 3, which is the leading-note, must always be indicated by a ♯, x, or ♮, thus:— $\substack{7\\ \sharp}$, $\substack{7\\ \times}$, $\substack{7\\ \natural}$.		In the minor key, 6, which is the leading-note, must always be indicated thus:— $\substack{\sharp 6\\ 4\\ 3}$, $\substack{\times 6\\ 4\\ 3}$, $\substack{\natural 6\\ 4\\ 3}$, or $\substack{\not{6}\\ 4\\ 3}$	In the minor key, 4, which is the leading-note, must always be indicated thus:— $\substack{\sharp 4\\ 2}$, $\substack{\times 4\\ 2}$, $\substack{\natural 4\\ 2}$, or $\substack{4+\\ 2}$

All figures in brackets must be omitted in a figured Bass, except those which indicate the leading-note in the minor key.

171. The note represented by the **lowest even figure is the root** of the chord. Where there is no even figure (as in $\begin{smallmatrix}7\\5\\3\end{smallmatrix}$) the Bass-note is the root.

The note represented by the **highest odd figure is the discord.** Where there is no odd figure (as in $\begin{smallmatrix}6\\4\\2\end{smallmatrix}$) the Bass-note is the discord.

Hints for Examinations.

At Examinations, candidates are often asked **to write a Dominant 7th or one of its inversions over a given Bass-note.** In order to do this correctly, it is necessary to remember the exact numerical name and quality of every interval above the Bass in the chord asked for. Thus :—

(*a*) The *Dominant 7th* consists of a major 3rd, perfect 5th, and minor 7th, above the Bass, which is its root.

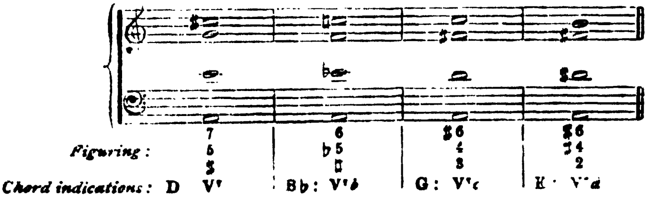
(*b*) Its *First Inversion* consists of a minor 3rd, diminished 5th, and minor 6th, above the Bass. The root lies a major 3rd below the Bass.

(*c*) Its *Second Inversion* consists of a minor 3rd, perfect 4th, and major 6th, above the Bass. The root lies a perfect 5th below the Bass.

(*d*) Its *Third Inversion* consists of a major 2nd, augmented 4th, and major 6th, above the Bass. The root lies a minor 7th below the Bass.

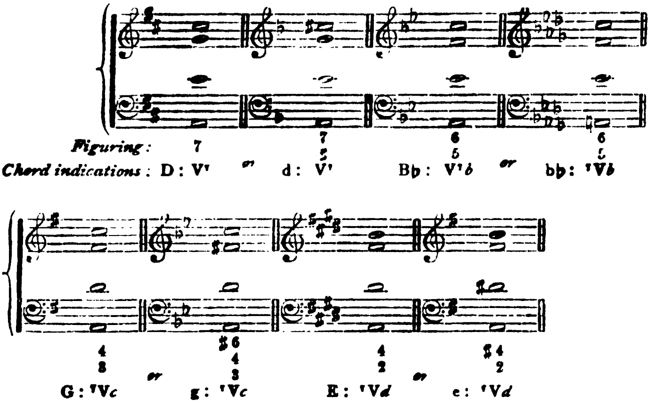
And if, for example, A be the given Bass-note, the chords *a*, *b*, *c*, *d*, work out as follows :—

Fig. 119.



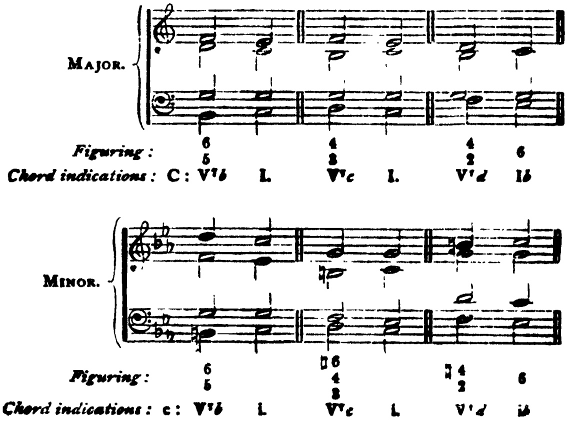
It will then be easy to supply the key-signature for the given chord :—

Fig. 120.


Figuring:
7
7 #
6 5
6 5
Chord indications: D: V7 or d: V7 Bb: V7b or bb: V7b
4 3
#6 4 3
4 2
#4 2
G: V7c or g: V7c E: V7d or e: V7d

172. Resolution of the inversions of the Dominant 7th upon Tonic Harmony.—As a general rule, make the *7th and 5th* fall one degree; make the 3rd rise one degree; and allow the *root to remain stationary.*

Fig. 121.


Major.
Figuring:
6 5
4 3
4 2
6
Chord indications: C: V7b I. V7c I. V7d Ib
Minor.
Figuring:
6 5
♮6 4 3
♮4 2
6
Chord indications: c: V7b i. V7c i. V7d ib

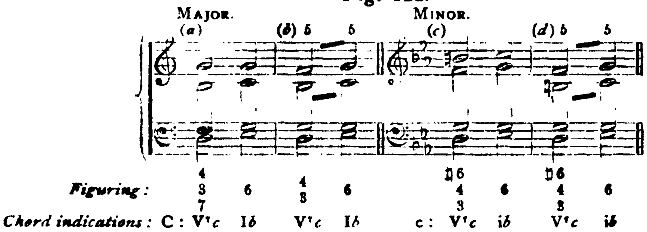
Observe that :—

In the 1st inversion (V^7b) the discord is the 5th from the Bass.
„ 2nd „ (V^7c) „ „ „ 3rd „ „ „
„ 3rd „ (V^7d) „ „ „ Bass-note itself.

In the third inversion the resolution chord is **I*b*, not I.**

In the second inversion the resolution-chord may be sometimes I*b*, instead of I. In this case, the Bass-note of the chord V^7c ***rises*** instead of falls. When this is so, the discord may rise too—in thirds with the Bass :—

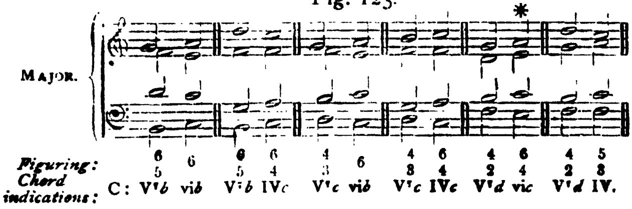
Fig. 122.

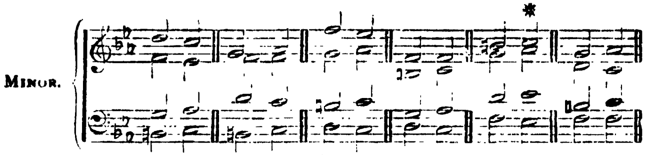


173. As we have already seen in § 64, consecutive 5ths are allowed (because unproductive of a bad effect) when one of them is *diminished* and the other *perfect*, or *vice versâ*. See Fig. 122 (*b*) and (*d*), and compare these with Fig. 66.

174. **Resolutions of the inversions of the Dominant 7th upon sub-mediant** (vi. or VI.) **and sub-dominant** (IV. or iv.) **harmony.**—As a general rule, *always* make the **3rd of the root** rise one degree; make the **7th of the root** fall one degree in sub-mediant harmony, and remain stationary in sub-dominant harmony; the **5th of the root** may fall one degree in both chords (VI. or IV.), but may sometimes rise one degree in sub-mediant harmony (vi*c* or VI*c*). See Fig. 123, ✱ ✱.

Fig. 123.

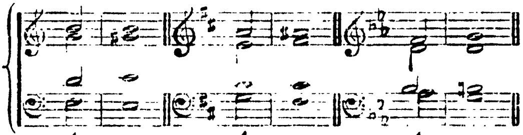

MAJOR.
✱
Figuring:
6 5
6
6 5
6 4
4 3
6
4 3
6 4
4 2
6 4
4 2
5 3
Chord indications: C: V⁷*b* vi*b* V⁷*b* IV*c* V⁷*c* vi*b* V⁷*c* IV*c* V⁷*d* vi*c* V⁷*d* IV.


MINOR.
*
Figuring: 6 5 | 6 | 6 5 | 6 4 | ♮6 4 3 | 6 | ♮6 4 3 | 6 4 | ♮4 2 | 6 4 | ♮4 2 | 5 3
Chord indications: c : V^7b VIb V^7b iv$c$ V^7c VIb V^7c iv$c$ V^7d VIc V^7d iv

Consecutive 4ths to the Bass must be carefully avoided in all these resolutions.

175. The **3rd inversion may be exceptionally resolved** upon the dominant triad of the relative minor key :—

Fig. 124.

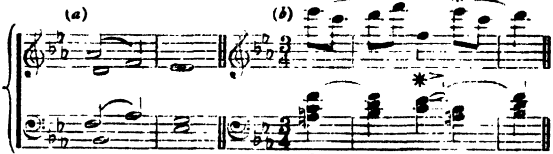

Figuring: 4 2 | ♯ | 4 2 | ♯ | 4 2 | ♮
Chord indications: C : V^7d a : V D : V^7d b : V E♭ : V^7d c : V

In this resolution the leading-note remains stationary, the root rises a chromatic semitone, and the 5th of the root rises one degree.

176. **Deferred Resolution.**—The 7th to the root need not be resolved in the same part in which it was originally sounded ; it may be transferred from one part to another, more than once—but it must finally be resolved in that same part in which it was *last* sounded.

Fig. 125.

BEETHOVEN : *Sonata, Op. 7.*


(a)
(b)
*
*
Figuring: 7 | 6 5 | 4 3 | 6 5
Chord indications: E♭: V^7 I. B♭: V^7b I. V^7c V^7b I.

In Fig. 125 (*a*) the 7th is transferred from the Treble to the Tenor part, and resolved in the latter In Fig. 125 (*b*) the reverse is the case, and the 2nd inversion is changed to the 1st inversion before the discord is resolved. Notice, too, in Fig. 125 (*b*) how the discordant note passes first to a note of the harmony (E♭ to C in the highest part) before it is resolved. This is often done, especially in instrumental music.

177. When the discord is heard in the Bass—as in the 3rd inversion—it is best resolved there: it is not good to transfer the discord from the Bass to one of the upper parts.

178. **In three parts**, when use is made of the chord of the dominant 7th and its inversions:—

the	5th	of the	Direct chord	(V^7)	is *omitted.*
,,	3rd *or* 6th	,,	First inversion	(V^7b)	,,
,,	4th	,,	Second ,,	(V^7c)	,,
,,	2nd *or* 6th	,,	Third ,,	(V^7d)	,,

In more than four parts either the root or 5th (or both) may be doubled.

179. Chords of the seventh upon **all degrees of the scale other than the dominant** are called **Secondary Sevenths.** They are indicated thus:—I^7, ii^7, iii^7, IV^7, vi^7, vii^{o7}. Their inversions are figured in exactly the same way as the inversions of the dominant 7th. A full description of the treatment of Secondary 7ths and their resolutions will be found in the *Senior* and *Higher Local Text-Books.*

CHAPTER IX.

SUSPENSIONS, RETARDATIONS, APPOGGIATURAS, AUXILIARY NOTES.

180. Any tones are called **unessential** or foreign to the harmony, when they have no direct *perpendicular* relation with the chord against which they are sounded; but are associated with it in merely a *horizontal* manner. Unessential tones are of **two kinds**:—

(i.) They may come *before* the real or essential tones of a chord;

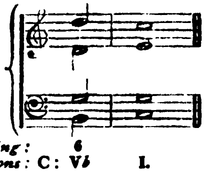
(ii.) they may come *after* the essential tones.

181. **Unessential** tones which come *before* essential tones—thus *delaying* or *suspending* their appearance—are called **Suspensions and Retardations.**

Unessential tones which come *after* essential tones are called **Passing Notes.** (For these, see Chapter X.)

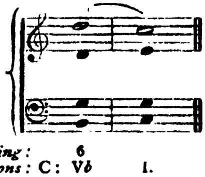
182. **The process of Suspension.**—Let us suppose we are passing from a chord on a *weak* beat of the bar to another chord on the **strong** beat immediately succeeding :—

Fig. 126.



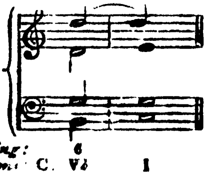
One tone belonging to the first chord *descends* by step of a second to a tone of the second chord :—

Fig. 127.



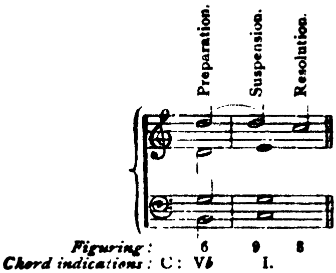
This tone (D), instead of moving *with* the rest of its associated tones in the first chord, may *lag behind*, while the tones of the second chord are sounded against it :—

Fig. 128.



But it forms ***no essential*** tone of the second or accented chord; on the contrary, it sounds foreign or discordant by its undue prolongation. The ear immediately begins to long for the delayed tone (C), which has been kept back from sounding in concert with its associates of the second chord. When the delayed tone finally makes its appearance, the ear is satisfied :—

Fig. 129.



183. The previous sounding of the tone which is to become a discord, is called its **Preparation** ; the retaining of this tone against the second chord is called its **Suspension** (indicated in the following examples by the initial letter S) ; the sounding of the delayed tone of the second chord is called the **Resolution** of the Discord of Suspension.

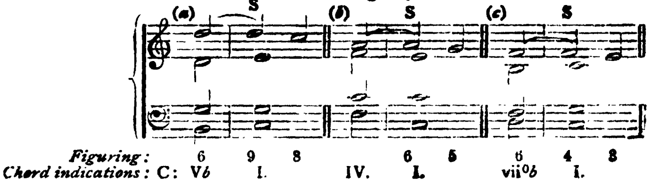
It will be observed that the note of preparation is *tied* to the note of suspension, thus causing a syncopation.

A suspension may be therefore **defined** as an unessential discord which stands in lieu of the *accented* note to which the ear expects the part to proceed. Accordingly, *Preparation*, *Suspension*, and *Resolution*, must all three take place in one and the same part, the Suspension itself occurring upon the strong accent.

184. By a **Direct Suspension** we mean the keeping back of the 8ve of the root, the 5th, the 3rd, or the root itself, of an uninverted triad.

These Direct Suspensions are usually **figured** respectively 9 8, 6 5, 4 3, $\begin{smallmatrix}4 & - \\ 2 & -\end{smallmatrix}$. The last is sometimes figured $/\begin{smallmatrix}5 \\ 3\end{smallmatrix}$.

Fig. 130.



Figured with lines of Continuation.

Figured with Oblique Dash.

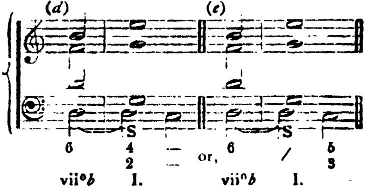


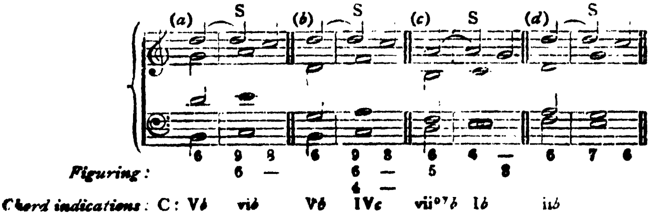
Fig. 130 (*a*) represents a 9th delaying the 8ve of the root of a triad.
,, (*b*) ,, 6th ,, ,, 5th of a triad.
,, (*c*) ,, 4th ,, ,, 3rd of a triad.
,, (*d*) ,, the root of a direct triad delayed by the note above it.
,, (*e*) ,, same as (*d*), but figured with an Oblique Dash.

185. An **Oblique Dash** marked over or under a Bass-note, as in Fig. 130 (*e*), means that the tones belonging to the next Bass-note (which must be figured, even though a common chord has to be played) must be sounded with the Bass-note marked with the oblique dash.

186. By an **Inverted Suspension** we mean the keeping back of the Bass-note (or one of the upper tones) of one of the inversions of a triad ($\begin{smallmatrix}6\\3\end{smallmatrix}$ or $\begin{smallmatrix}6\\4\end{smallmatrix}$)

These Inverted Suspensions are usually figured $\begin{smallmatrix}9&8\\6&-\end{smallmatrix}$, $\begin{smallmatrix}9&8\\6&-\\4&-\end{smallmatrix}$, $\begin{smallmatrix}6&-\\4&3\end{smallmatrix}$ 7 6, $\begin{smallmatrix}5&-\\2&-\end{smallmatrix}$ (or $/\begin{smallmatrix}6\\3\end{smallmatrix}$), $\begin{smallmatrix}6&-\\5&4\end{smallmatrix}$, $\begin{smallmatrix}7&6\\4&-\end{smallmatrix}$.

Fig. 131.



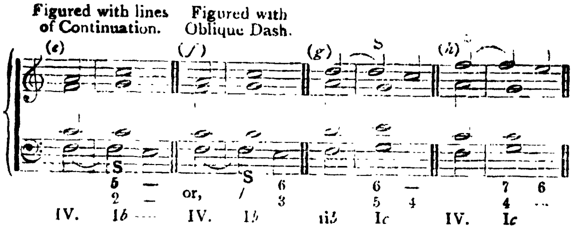

Figured with lines of Continuation.
Figured with Oblique Dash.
(e)
(f)
(g)
(h)
S
S
S
5 —
2 —
or,
/
6
3
6 —
5 4
7 6
4 ...
IV.
Ib
IV.
Ib
iib
Ic
IV.
Ic

Fig. 131 (*a*) represents a 9th delaying the 8ve of Bass-note, 1st inversion.
,, (*b*) ,, 9th ,, 8ve ,, ,, 2nd ,,
,, (*c*) ,, 4th ,, 3rd ,, ,, 1st ,,
,, (*d*) ,, 7th ,, 6th ,, ,, 1st ,,
,, (*e*) ,, Bass-note of 1st inversion delayed by the note [above it.
,, (*f*) ,, the same as (*d*), but figured with oblique dash.
,, (*g*) ,, a 5th delaying the 4th of a 2nd inversion.
,, (*h*) ,, 7th delaying the 6th of a 2nd inversion.

187. By a **Double Suspension** we mean any two suspensions combined.

The following suspensions are usually combined and figured: $\substack{9\ 8\\4\ 3}$, $\substack{9\ 8\\7\ 6}$, $\substack{4\ -\\3\ 3}$, $\substack{6\ 6\\2\ -}$.

Fig. 132.

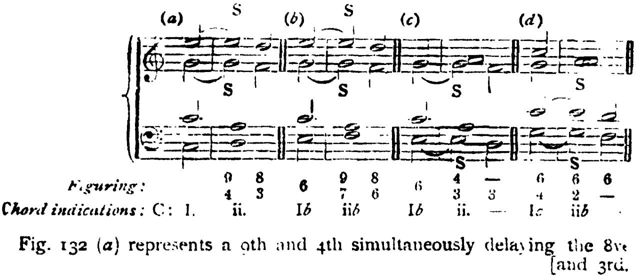


Fig. 132 (*a*) represents a 9th and 4th simultaneously delaying the 8ve [and 3rd.
,, (*b*) ,, 9th and 7th ,, the 8ve and 6th
,, (*c*) ,, the root and 3rd of a direct triad delayed by the [notes above them.
,, (*d*) ,, the Bass-note and 6th of a 1st inversion delayed [by the notes above them

188. **Retardation** (indicated in the following examples by the initial letter R) is a name given to any syncopated discord which resolves *upwards* instead of downwards.

The principal retardations are :—7 8, 5 6, 2 3, 4 5.

Fig. 133.

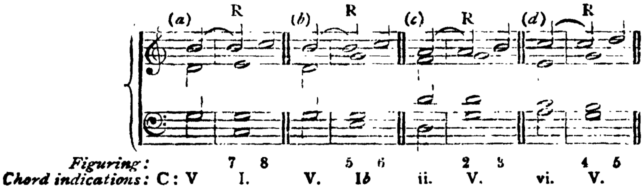


Fig. 133 (*a*) represents the 8ve of the root of a triad retarded by the 7th.
,, (*b*) ,, the 6th of a 1st inversion retarded by the 5th.
,, (*c*) ,, the 3rd of a triad retarded by the 2nd. The 3rd is not sounded with the 2nd.
,, (*d*) ,, the 5th of a triad retarded by the 4th. The 5th is not sounded with the 4th.

189. **Retardations** are often **combined with suspensions :**

The following are the principal combinations :—$\begin{matrix}7&6\\5&\end{matrix}$, $\begin{matrix}9&8\\7&\end{matrix}$, $\begin{matrix}9&8\\7&6\\5&\end{matrix}$.

Observe that these are *not figured* :— $\begin{matrix}7&6\\5&6\end{matrix}$, $\begin{matrix}9&8\\7&8\end{matrix}$, $\begin{matrix}9&8\\7&6\\5&6\end{matrix}$.

Fig. 134.

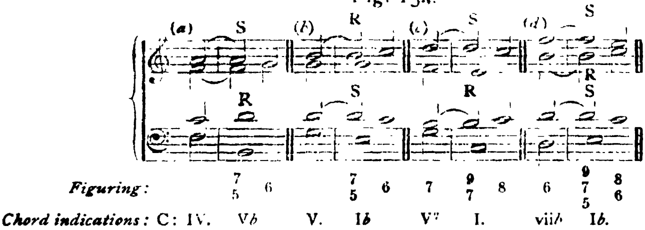


Fig. 134 (*a*). The 6th of first inversion (**V*b***) is simultaneously *suspended* by the 7th, and *retarded* by the 5th. Observe that both 7th and 5th proceed to the 6th. *The 6th is not figured twice.*

Fig. 134 (*b*). The **6th** of first inversion (I*b*) is simultaneously *suspended* by the 7th, and *retarded* by the 5th. Observe the same figuring as (*a*).

Fig. 134 (*c*) represents the 9 8 suspension and the 7 8 retardation combined over the tonic root. Observe that both 9th and 7th proceed to the 8ve. *The 8ve is not figured twice.*

Fig. 134 (*d*) represents a triple combination, viz., the 9 8 and 7 6 suspensions sounding together with the 5 6 retardation. *The 6th is not figured twice.*

190. **The complete Dominant 7th chord may be suspended over the tonic root:—**

Fig. 135.

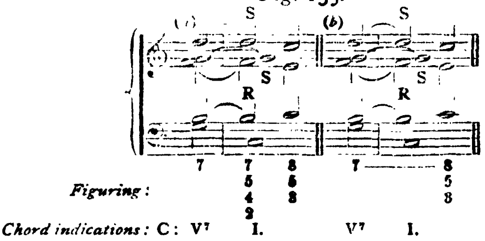


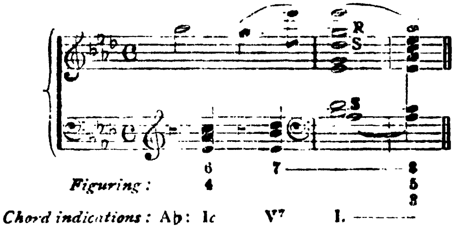
Fig. 135 (*a*) represents suspension of the complete chord of the dominant 7th over the tonic root.

Fig. 135 (*b*) represents the same as (*a*); but the figuring is carried out by means of a line of continuation.

When the complete chord of the dominant 7th is suspended, it is quite unnecessary that the tones which are discordant to the tonic root I. shall be prepared at exactly the same pitch in chord V⁷ :—

Fig. 136.

BEETHOVEN: Sonata, Op. 2, No. 1.



Hints for Examinations.

At Examinations, candidates may be asked :—

(i.) to write suspensions and retardations, and resolve them according to a given figuring;

(ii.) to supply omitted notes in examples of suspensions, etc.;

(iii.) to prepare or resolve given suspensions and retardations.

The following hints may be found useful:—

Hint I.—Find the note which will be the suspension or retardation according to the figuring (9, 7, 6, 5, 2, etc.).

Hint II.—Find the same note in the previous chord. This will be the preparation of the suspension or retardation.

Hint III.—Write the suspension, etc., in the same part as the note of preparation.

Hint IV.—Tie the preparation note and suspension note with a *bind* (‿).

Hint V.—Resolve the discord in the same part. If a ***suspension***, resolve the discord *down* one degree; if a ***retardation*** resolve it *up* one degree.

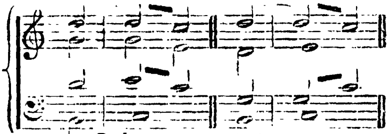
Hint VI.—The other notes belonging to the chord of resolution must be written over the Bass-note which has the discord of suspension or retardation.

Hint VII.—Most suspensions sound best in the Treble part.

Hint VIII.—The suspended note must not be doubled.

Hint IX.—The note of resolution, or its octave, must not be sounded in any other part *with* the suspension, except in the case of the 9 8.

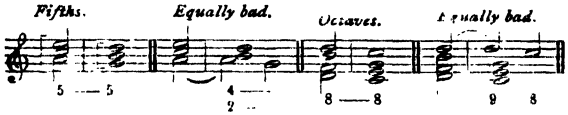
Hint X.—The 8ve, or unison, to the note of resolution must not be approached in the melody of another part, in *similar* motion to the progression of the discord. It may, however, be approached by contrary *motion.*



Bad. Similar motion to 8ve of resolution.

Good. Contrary motion to 8ve of resolution.

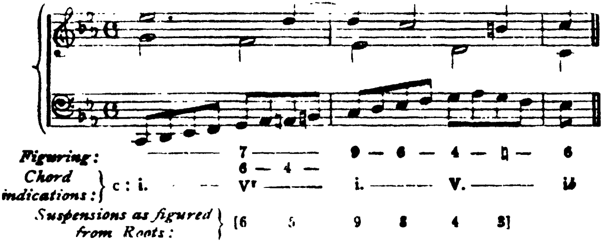
Hint XI.—Consecutive 8ves and 5ths are obviously bad, even though the second 8ve or 5th be delayed by a suspension. In other words, when the use of a second concord will involve consecutives, the bad effect is not mitigated by the first concord being suspended.



191. **How suspensions and retardations are indicated in analysis.**—Suspensions may be indicated by S, and retardations by R, written against the discords themselves. Being *unessential* tones (foreign to the chord they are sounded against), the analytical indication *belonging to the chord of resolution* is always written under the Bass-note which has the discord of suspension or retardation. This will be a clear mode of indication when passages are analyzed which have suspensions, etc., written over a moving (*contrapuntal*) Bass:

Fig. 137.

Bertini: *Study, Op. 29, No. 22.*



192. **Figuring of Suspensions.**—Suspensions may be easily recognised by the discordant notes appearing only on the accented beats of the bar, and being *tied* to a note in the same part on the unaccented beat immediately preceding, viz., that which is known as the "note of preparation."

A 9th is easily seen to be a suspension when it merely delays the 8ve of the root or the Bass-note of the first or second inversion of a triad. See Figs. 130 (*a*); 131 (*a*), 131 (*b*).

A 7th is seen to be a suspension (and not an essential note of a chord of the 7th) when it is followed by a 6th on the same Bass-note and is not accompanied by a 5th. Fig. 131 (*d*), 131 (*h*).

A 7th is also seen to be a suspension (and not an essential note of a chord of the 7th) when it is accompanied by a 4th from the Bass. In this case, the 7th delays the 6th of the Bass-note of a second inversion of a triad, and is figured ${}^{7\,6}_{4\,-}$. Fig. 131 (*h*).

N.B.—When two *sets of figures are given under one Bass-note, look to the* second set *for an explanation of the chord, which will probably be a familiar one.*

A 4th is a suspension (and not an essential note of either the chords ${}^{6}_{4}$, ${}^{4}_{8}$, or ${}^{4}_{2}$) when it merely delays the 3rd of a triad. Fig. 130 (*c*).

A 6th is a suspension (and not an essential note of either ${}^{6}_{3}$, ${}^{6}_{4}$, ${}^{6}_{5}$, ${}^{4}_{3}$, or ${}^{4}_{2}$) when it merely delays the 5th of a triad. Fig. 130 (*b*).

When the 4th and 2nd from the Bass are used *without a 6th* upon an accented beat, and the Bass is prepared on the previous unaccented beat, and moves down one degree whilst the upper notes remain, the chord is not the last inversion of a 7th $\begin{pmatrix}6\\4\\2\end{pmatrix}$; but is merely the suspension of the root of an uninverted triad in the Bass part, and is figured ${}^{4\,-}_{2\,-}$. Fig. 130 (*d*), (*e*). The lines of continuation distinguish the figuring from that of $^{7}\mathrm{V}d$ or the last inversion of *any* chord of the 7th

When the 5th and 2nd from the Bass are used upon an accented beat, and the Bass is prepared and resolved downwards one degree, whilst the upper notes remain, the chord is the suspension of the Bass-note of a first inversion of a triad—Fig. 131 (*e*), (*f*)—and is figured ${}^{5\,-}_{2\,-}$.

The suspension ${}^{4\,-}_{2\,-}$ may be also figured $/{}^{5}_{8}$, and ${}^{5\,-}_{2\,-}$ as $/{}^{6}_{3}$, but in each case the full figuring of the chord above the Bass-note, *after* the one which carries the oblique dash, must be given. Fig. 130 (*e*) and Fig. 131 (*f*). The oblique dash means that the notes belonging to the *next* Bass-note must be sounded with the tied note of suspension in the Bass.

When the 6th and 5th from the Bass are used *without a 3rd*, and the 5th goes to the 4th of the same Bass-note, whilst the 6th remains, the chord is not the first inversion of a 7th, but the second inversion of a triad of which the

4th is delayed by the 5th from the Bass. This suspension is figured $\begin{smallmatrix}6\\5\end{smallmatrix}\overline{4}$, to distinguish it from $^{7}\mathrm{V}b$, or the first inversion of *any* chord of the 7th. Fig. 131 (*g*).

193. Suspensions and retardations which are unprepared are called **Appoggiaturas.** Formerly, these were written as *small* notes (see *Advanced Junior Text-Book*, pp. 72, 73); now they are usually written exactly as they are intended to be played.

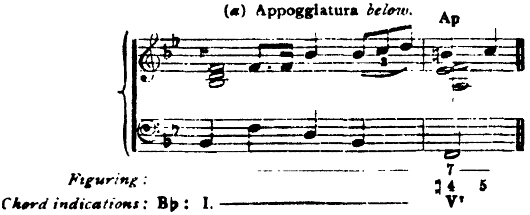
194. An **Appoggiatura** delays the appearance of some note belonging to a chord, and generally occurs upon the accent, one degree above or below the delayed harmony-note. When used *below* a note, an appoggiatura should be only one semitone distant from its resolution. See Fig. 138 (*a*). When used *above* a note, it may be either a tone or a semitone distant, according to its position in the diatonic scale of the key for the time being.

For purposes of analysis, an appoggiatura may be thus indicated :—**Ap.** See Fig. 138 (*a*), (*b*).

Fig. 138.

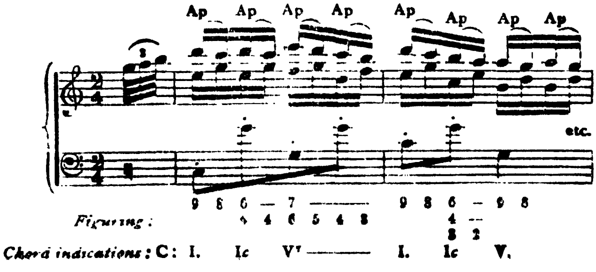
BEETHOVEN : *Adelaide.*

(*a*) Appoggiatura *below.*



J. B. **CRAMER** : *Study in C.*

(*b*) Appoggiaturas *above.*

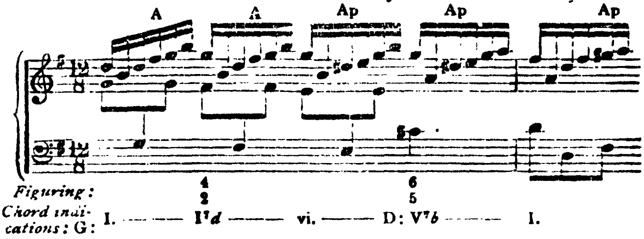


195. An **Auxiliary note** is a kind of appoggiatura which occurs upon a *less-accented* part of the bar than the harmony-note which it precedes. See Fig. 139.

For purposes of analysis, an auxiliary note may be thus indicated :—A.

Fig. 139.

J. B. Cramer: *Study in G.*



The D♯ in each case in Fig. 139 is an appoggiatura, which (as usual) comes upon a stronger accent than the harmony-note it precedes.

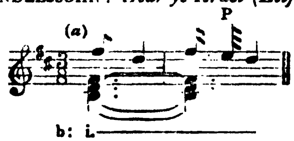
CHAPTER X.

Passing-Notes.

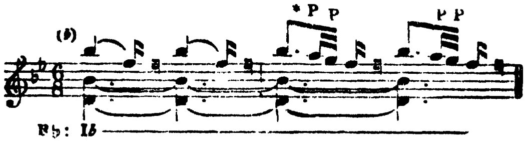
196. **Passing-notes** (or **Discords of Transition,** as they are sometimes called) are tones which do not belong to the chord they are sounded against, but which *pass from one harmony-note to another* in a step-by-step or scale-wise manner :—

Fig. 140.

Mendelssohn: *Hear ye Israel* (*Elijah*).



Mozart: *Symphony in G minor*



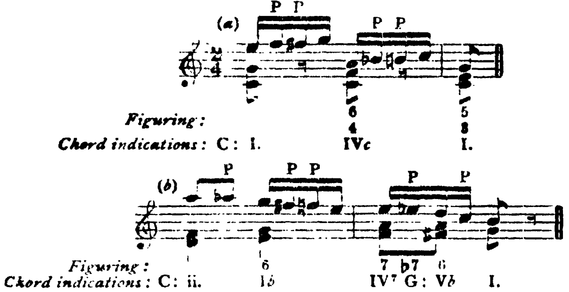
* Here are two passing-notes in succession.

197. **For purposes of analysis,** Passing-notes are conveniently indicated by a capital letter **P.**

198. Passing-notes usually occur upon **a less-accented part of the bar** than the harmony-notes they follow and precede.

199. Passing-notes may be **diatonic,** as in Fig. 140 (*a*), (*b*); or **chromatic,** as in Fig. 141 :—

Fig. 141.



A melodic passage which begins chromatically is generally **continued chromatically,** until a harmony-note is reached.

200. Each passing-note is **approached and quitted by step of second**; thus passing onwards to the next note of the scale. *There must be no turning back.*

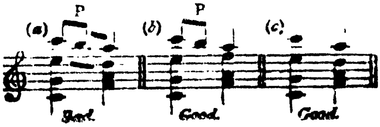
201. The note ultimately reached in the direction taken by the passing-note is one belonging either to the same chord—see Fig. 140 (*a*), (*b*)—or to a different chord—see Fig. 142 (*b*).

A passing-note does not return to the chord-note from which it started.

202. A passing-note must not produce consecutive 8ves or 5ths with some other part—Fig. 142 (*a*).

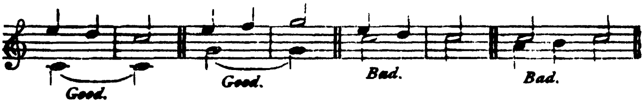
To avoid this (if it should so happen) the following note of the other part must be altered—Fig. 142 (*b*)—or the passing-note itself must be omitted—Fig. 142 (*c*) :—

Fig. 142.



203. A passing-note may proceed by oblique motion to an 8ve, but should not so proceed to a unison :—

Fig. 143.

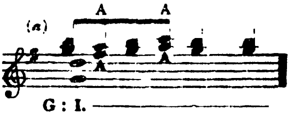


204. Passing-notes must not be confused with **unaccented auxiliary notes.** The difference is this :—

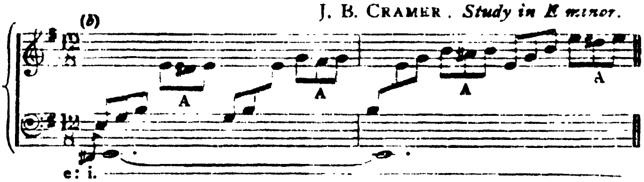
A *passing-note* passes either from one harmony-note to another—Fig. 140 (*a*)—or to a second passing-note in the same direction—Fig. 140 (*b*). An *unaccented auxiliary note* returns to the note it started from :—

Fig. 144.

HANDEL : *See the conquering hero.*



J. B. CRAMER . *Study in E minor.*

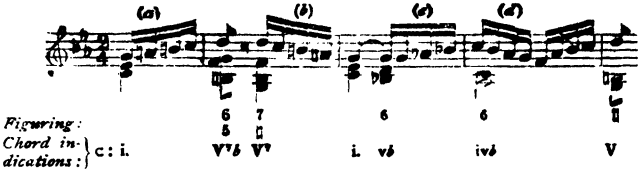


205. **In the minor key** melodic passages containing passing-notes are sometimes written according to the melodic form of the minor scale, and at other times according to the harmonic form.

The **Ascending Melodic form** of the minor scale is used for melodic passages written over chords which do not contain the minor 6th or minor 7th of the scale. Fig. 145 (*a*), (*b*).

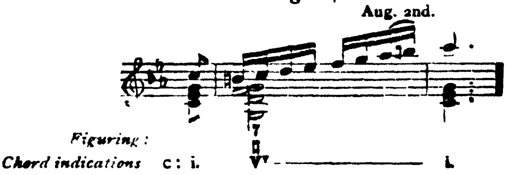
The **Descending Melodic form** of the minor scale is used for melodic passages written over chords which do not contain the leading-note or major 6th. Fig. 145 (*c*), (*d*). In this way, "false relation" is avoided.

Fig. 145.



206. The **Harmonic form** of the minor scale may be used for melodic passages when dominant harmony is in evidence. The augmented 2nd is unobjectionable when at least the entire upper tetrachord of the scale is heard:—

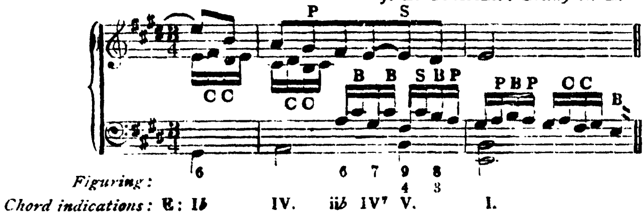
Fig. 146.



207. **Changing-notes** are two **auxiliary-notes** (used with the leap of a 3rd **between them), the second of which** returns **to the harmony-note which is situated between the two auxiliary-notes.**

Fig. 147.

J. B. CRAMER: *Study in E.*

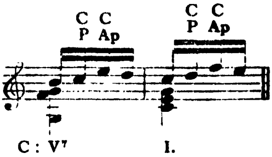


In Fig. 147: C = Changing-note, P = Passing-note, **S = Suspension.** B = Bye-tone.

208. **Changing-notes most frequently occur** when an auxiliary-note, instead of returning *at once* to its harmony-note, first skips a 3rd to the auxiliary-note on the other side of that same harmony-note. **See the first, second, and sixth**

semiquaver groups in Fig. 147. Changing-notes may, however, sometimes occur when a passing-note leaps a third to the auxiliary-note (or appoggiatura) on the other side of the harmony-note to which it is proceeding :—

Fig. 148.

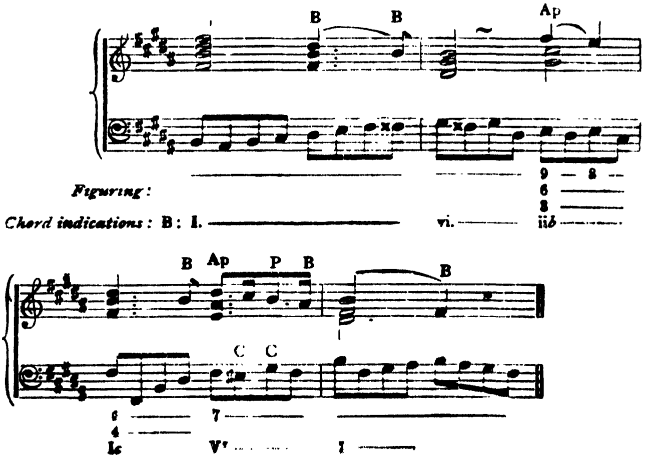


209. **Figuring of Passing-Notes.**— Those in the ***upper parts*** are not indicated in the figured Bass unless the *tempo* is slow. When passing-notes occur in the *bass part*, **lines of continuation** are drawn, extending from the first Bass harmony-note of the chord to the point where the next *change of root* occurs.

210. **A line of continuation** denotes that the harmony sounded at its commencement must remain unchanged until its end.

Fig. 149.

R. WAGNER : *Tannhauser*.

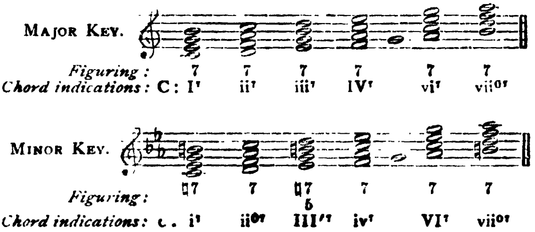


CHAPTER XI.

OTHER TERMS USED IN HARMONY.

211. **Secondary 7ths.** Diatonic chords of the 7th on all other degrees of the scale than the dominant are called secondary 7ths. The dominant 7th is sometimes called the "primary 7th."

Fig. 150.


MAJOR KEY.
Figuring: 7 7 7 7 7 7
Chord indications: C: I⁷ ii⁷ iii⁷ IV⁷ vi⁷ vii⁰⁷
MINOR KEY.
Figuring: ♮7 7 ♮7 6 7 7 7
Chord indications: c. i⁷ ii⁰⁷ III′⁷ iv⁷ VI⁷ vii⁰⁷

212. **Secondary 7ths and their inversions** are *figured* in exactly the same way as the dominant 7th and its inversions.

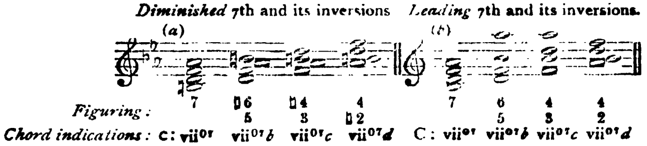
The Direct chord is figured 7
Its 1st inversion (*b*) ,, $\begin{smallmatrix}6\\5\end{smallmatrix}$
Its 2nd inversion (*c*) ,, $\begin{smallmatrix}4\\3\end{smallmatrix}$
Its 3rd inversion (*d*) ,, $\begin{smallmatrix}4\\2\end{smallmatrix}$

213. But it must be distinctly remembered that the **intervals from the roots and bass-notes of Secondary 7ths and their inversions** are different in *quality* from those of the dominant 7th and its inversions. Secondary 7ths, which are based upon triads with a *major* 3rd, have their roots indicated by a *large* numeral: those based upon triads with a *minor* 3rd are indicated by a *small* numeral. ^{0} indicates a *diminished* 5th from the root: ′ indicates an *augmented* 5th from the root. See Fig. 150.

214. **Chords of the Diminished and Leading 7th.**—A diatonic chord of the 7th having the leading-note of the

key as its Bass-note is called in the minor key a *diminished* 7th, and in the major key a *leading* 7th.

Fig. 151.


Diminished 7th and its inversions
Leading 7th and its inversions.
(*a*)
(*b*)
Figuring:
7 ♮6 5 ♮4 3 4 ♮2
7 6 5 4 3 4 2
Chord indications: C: vii^{07} vii^{07}b vii^{07}c vii^{07}d
C: vii^{07} vii^{07}b vii^{07}c vii^{07}d

The **intervals of the Diminished 7th**, reckoned from the Bass, are minor 3rd, diminished 5th, and *diminished* 7th. The last interval gives the chord its name.

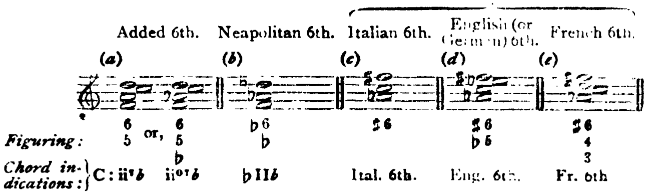
The **intervals of the Leading 7th** from the Bass are minor 3rd, diminished 5th, and *minor* 7th. The 7th from the Bass should always be heard *above* that note, except in the last inversion. Fig. 151 (*b*).

For purposes of analysis, the Diminished 7th is indicated vii$^{0\flat 7}$ when used chromatically in a major key with less than three sharps in its signature; or vii$^{0\natural 7}$ in a major key with more than two sharps in its signature; the **Leading 7th** is always indicated vii^{07}.

215. **Fancy names given to various chords containing the interval of a 6th:—**

Fig 152.

Chords of the Augmented 6th.



(*a*) **Added 6th** is the name given to a chord of *six-five-three*, having the subdominant of the scale as its Bass-note. It is so called because it has a 6th added to the triad of the subdominant (IV. or iv.). The 3rd from the Bass may be either major or minor. It is really the first inversion of the secondary 7th on the supertonic—ii^7b.

(*b*) **Neapolitan 6th** is a chord of *six-three*, having the subdominant of the scale as its Bass-note. The 3rd and 6th are *always* both *minor*. It is really the first inversion of the chromatic triad on the minor 2nd of the key—♭II*b*.

(*c*) **Italian 6th** is a chord of *six-three*, having the minor 6th or minor 2nd degree of the scale as its Bass-note. The 3rd is always *major*, the 6th always *augmented*. For purposes of analysis, it is indicated "Ital. 6th."

(*d*) **English** (formerly known as German) **6th** is a chord of *six-five-three* on the minor 6th or minor 2nd degree of the scale. The 3rd is *major*, the 5th *perfect*, the 6th always *augmented*. For purposes of analysis, it is indicated "Eng. 6th" or "Ger. 6th"

(*e*) **French 6th** is a chord of *six-four-three* on the minor 6th or minor 2nd degree of the scale. The 3rd is always *major*, the 4th and 6th always *augmented*. For purposes of analysis, it is indicated "Fr. 6th."

It will be observed that the Neapolitan, Italian, English, and French 6ths are all **chromatic chords**, *i.e.*, they contain notes foreign to the original key-signature, but do not change the key.

216. **A Sequence** is a succession of similar chords or phrases at higher or lower pitches; in other words, it is a passage consisting of two or more chords repeated part for part upon other notes of the same or a different key.

The *rhythm* of the original passage must be strictly adhered to in all the repetitions. Similar melodic or harmonic outlines, with *dissimilar* rhythms, are not sequential.

217. **A Tonal Sequence** is that in which the repetitions of the original phrase remain in the same key as at first; but the original intervals become changed in quality according to their position in the scale. See Fig. 154.

In a Tonal Sequence, skips of augmented intervals are allowed, and dissonant triads may be used, *except at the beginning of the sequence.*

Fig. 153.

Ascending Tonal Sequence.

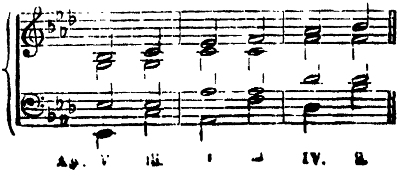
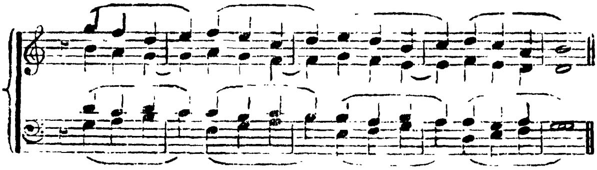


Fig. 154.

Descending Tonal Sequence.



Figuring: 6 6 6 6 6 6 6

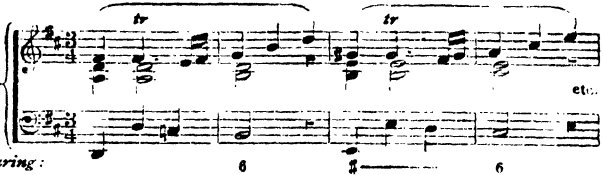
Chord indications: C: V. IV*b* V*b* I. IV. iii*b* IV*b* vii° iii. ii*b* iii*b* vi. ii. I*b* ii*b* V.

218. **A Real Sequence** is that in which each repetition of the original phrase occurs in a different key from that of the preceding. The original intervals are *exactly* reproduced in each repetition. An *ascending* Real Sequence is often called **Rosalia.**

Fig. 155.

Ascending Real Sequence ("Rosalia").

Handel: *Minuet* (*Ariadne*).



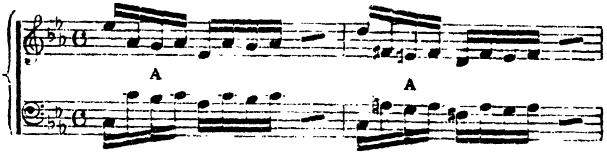
Figuring: 6 ♯—— 6

Chord indications: G: V. —— V^7*d* I*b* A: V. —— V^7*d* I*b*

Fig. 156.

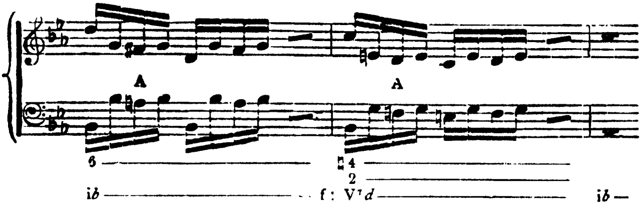
Descending Real Sequence.

J. S. Bach: *Second Prelude.*



Figuring: 5 ♮6 ♯4 2

Chord indications: c: VI*b* —— g: V^7*d* ——



219. A Note of Anticipation is a note sounded *before* its expected time; belonging not to the chord against which it is sounded, but to the following chord. For purposes of analysis, it is conveniently indicated **Ant.** :—

Fig. 157.

Beethoven : *Sonata in G.*

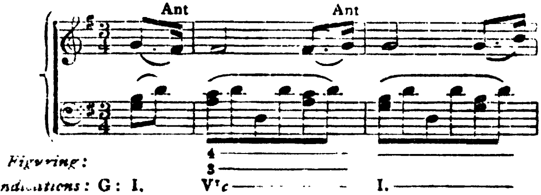
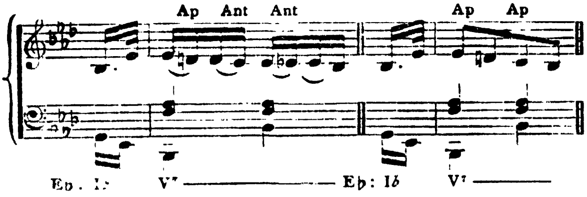


Fig. 158.

Beethoven : *Sonata Pathetique, Op. 13.*

The same passage reduced to its simplest form.



In the above example (Fig. 158) there are two notes of anticipation: the first (C) anticipates the appoggiatura which keeps back the root of the Dominant 7th; the second (C♭) anticipates the chromatic alteration of that same appoggiatura.

A note of anticipation is generally to be found in the highest (or Treble) part, and is preceded by a harmony-note belonging to the chord it is sounded against. It is rarely, if ever, preceded by a passing-note, or by any other "unessential" note.

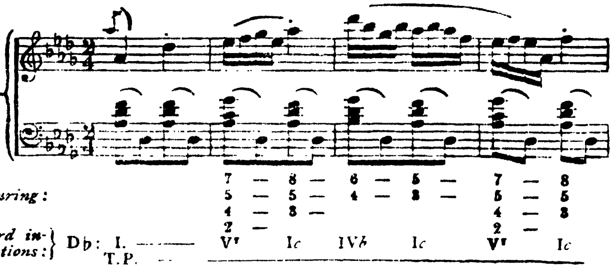
220. **Organ-Point, Pedal-Point, Pedal-Bass or Pedal.**—These are technical names given to the dominant or the tonic when either is sustained in the Bass, whilst harmonies are sounded above it, of which the sustained note does not always form a portion. *A pedal in the Bass part*, after the beat on which it is first struck, *does not form the true Bass of the harmony;* the part next above the pedal is the *true Bass for the time being.*

In Oratorio Choruses, especially those in the Fugal style, such a low *holding-note* would be played upon the *pedal-clavier* of the *organ.* Hence the names *Organ*-Point, *Pedal*-Point. See the last choruses in both *St. Paul* and *Elijah*, by Mendelssohn.

In music written for pianoforte and instruments whose tones die away quickly, *rhythmical repetitions* of the same Bass-note take the place of, and are regarded exactly as if they were actually one long sustained sound :—

Fig. 159.

L. SCHYTTE : *Rhapsody in D♭.*



221. **For analytical purposes**, a Pedal-Bass is indicated T.P. (tonic pedal), D.P. (dominant pedal). All chords of which the Pedal-Bass forms no essential portion are indicated in analysis without any reference to the pedal.

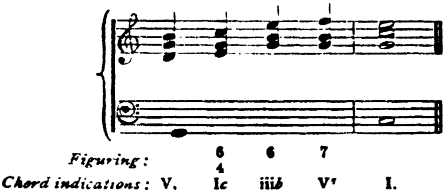
But, **in figured Bass**, the intervals of all the chords above a pedal-note are reckoned from the pedal.

222. A sustained dominant Bass-note is not called a

"Pedal" when it forms an essential part of *every* chord used above it—such as the chords of the dominant triad (V.), dominant 7th (V^7), tonic triad (I.), and mediant triad (iii.)—Fig. 160. These *may* occur during the course of a Pedal, but other and more dissonant combinations (of which the pedal forms no essential portion) are mingled with them:—

Fig. 160.

Not a Pedal.

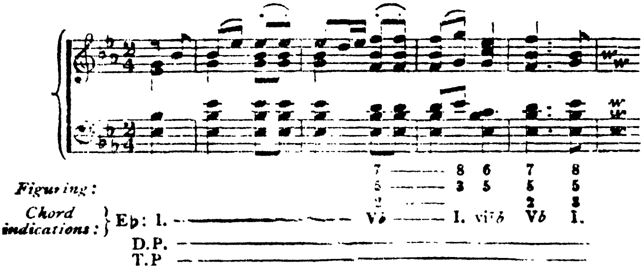


223. A Tonic Pedal (which is often used at the beginning and at the end of a piece) conveys to the ear the impression of satisfaction or rest—as opposed to the sense of progress and expectancy conveyed by a Dominant Pedal.

224. **Double Pedals.**—*Both* tonic and dominant notes may be sometimes sustained (or repeated):—

Fig. 161.

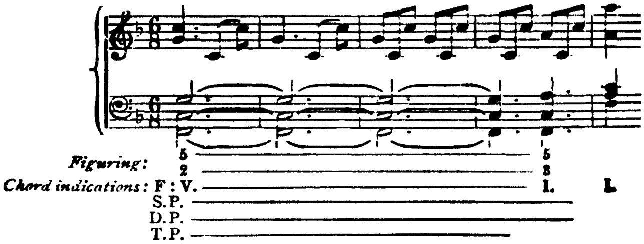
TSCHAÏKOWSKY: *Humoreske, Op. 10, No. 2.*



225. **Triple Sustained Notes.**—In music of a Pastoral character, occasionally *three* notes are sustained together in pedal fashion—the tonic, dominant, and supertonic.

Fig. 162.

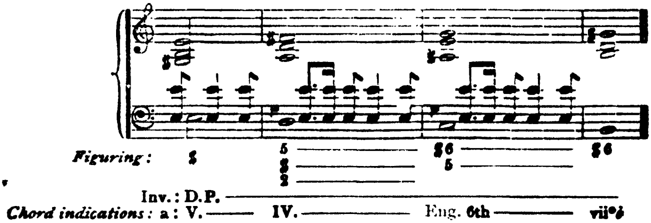
BEETHOVEN: *Pastoral Symphony*



226. **An Inverted Pedal** is a tonic or dominant note sustained or repeated in one of the *upper parts*, instead of in the Bass. In analysis, Inv. P. = "inverted pedal."

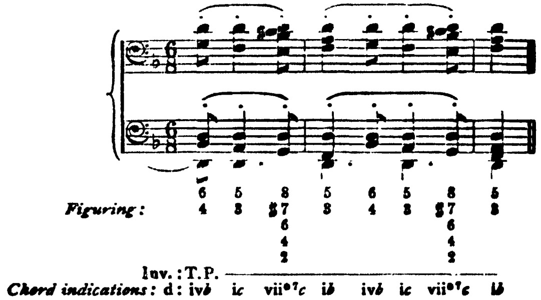
Fig. 163. E. GRIEG: *Pianoforte Concerto.*

(*a*) Inverted Dominant Pedal in middle part.



BEETHOVEN: *Largo e mesto, Op. 10, No. 3.*

(*b*) Inverted Tonic Pedal in top part.



Observe that the inverted pedal is "doubled" in the middle of the harmony by the left hand.

227. A **Ground Bass** is a theme which is continually repeated in the bass, each time with different upper parts. The Italian name for it is **Basso ostinato** (lit., "obstinate Bass").

228. A **melodia ostinata** is a melodic subject or theme which is continually repeated in the top part (or one of the upper parts) each time with different harmonies and bass.

CHAPTER XII.

MODULATION, FIGURING, AND ANALYSIS.

229. **Modulation** is a term used to express a **change of key.** If a piece of music were to remain in the same key from beginning to end, it would be wearisome and monotonous to the ear.

230. The key is changed to the *eye* (i.) by using necessary accidentals; or (ii.) by adopting a new key-signature.

The key is changed to the *ear* by playing the dominant and tonic harmonies (direct or inverted) of the new key. The new dominant harmony *alone* is insufficient to change the key; it must be followed by the tonic harmony of the new key. At least *two* chords are required to effect a modulation.

231. **Natural modulation** means a change of key which involves only one sharp or flat more or less than those in the original key-signature of the piece. Such keys are called **Attendant or Related Keys**, and are five, viz., those of the dominant and subdominant, with the relative minors (or majors) of each of these and of the tonic key.

Attendant Keys of C major:	Attendant Keys of C minor.
1. G major—the Dominant.	1. G minor—the Dominant.
2. E minor—Relative Minor of Dominant.	2. B♭ major—Relative Major of Dominant.
3. F major—the Subdominant.	3. F minor—the Subdominant.
4. D minor—Relative Minor of Subdominant.	4. A♭ major—Relative Major of Subdominant.
5. A minor—Relative Minor of Tonic.	5. E♭ major—Relative Major of Tonic.

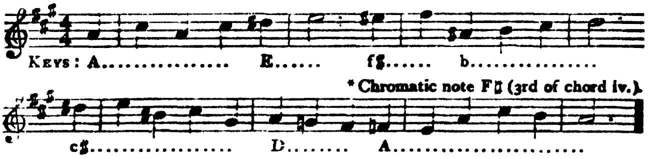
232. **Modulation to each of the five attendant keys** can be made by causing the dominant harmony (direct or inverted) of the new key to be followed by its own proper tonic harmony. Fig. 164 will show at a glance what degrees of the original scale or key have to be altered in order to effect the modulation. The ♯ placed before a figure shows that the scale-degree thus indicated has to be *raised* a semitone; the ♭ shows that it must be *lowered* a semitone.

Fig. 164.

FROM A MAJOR KEY		FROM A MINOR KEY	
To	ALTERED DEGREE.	To	ALTERED DEGREE.
Dominant	♯ 4th.	Dominant	♯ 4th and ♯ 6th.
Relative Minor of Dominant	♯ 4th and ♯ 2nd.	Relative Major of Dominant	♯ 6th.
Sub-dominant	♭ 7th.	Sub-dominant	♯ 3rd and ♭ 2nd.
Relative Minor of Sub-dominant	♭ 7th and ♯ 1st.	Relative Major of Sub-dominant	♭ 2nd.
Relative Minor of Tonic	♯ 5th.	Relative Major of Tonic	No accidental required.

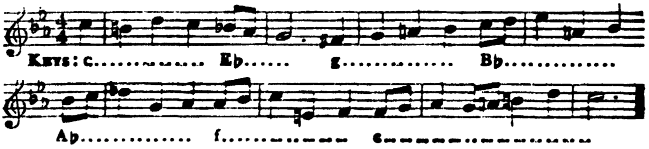
A reference to Fig. 164 will assist the student to determine the keys to which the music has changed (by the nature of the accidentals used) in the following melodies. Major keys are indicated by *capital* letters; minor keys by *small* letters:—

Fig. 165. **Modulating Melody in a Major Key.**


KEYS: A................ E...... f♯...... b...............
c♯................. D........ A........................

* Chromatic note F♮ (3rd of chord iv.).

Fig. 166. **Modulating Melody in a Minor Key.**


KEYS: c.................. E♭...... g.............. B♭.............
A♭............. f............... c...........................

---

* **Any note with an accidental which comes *next to a note of the same name belonging to the prevailing key*, is a chromatic note.**

The following examples will assist the student to figure the Bass, analyze the harmonies, and determine the modulations in a given passage :—

Fig. 167.

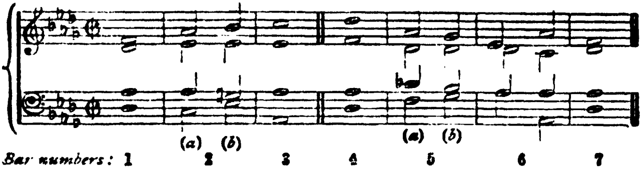


Fig. 167, Bar 1. Tonic chord—no figuring required.

,, ,, 2. (*a*) Six-three chord, root is 3rd below Bass, viz., A♭. This is dominant note. Hence chord is V*b*. Figure it 6.

(*b*) Major triad. Accidental is raised 4th. Hence a modulation is here made to dominant key. Root is E♭, *i.e.*, dominant of new key (V.). Figure it ♮.

,, ,, 3. Major triad, approached as tonic of key A♭ (I.), quitted as dominant (V.) of original key D♭. No figuring required.

,, ,, 4. Tonic chord. No figuring.

,, ,, 5. (*a*) Six-five-three chord. Accidental is flattened 7th. Hence a modulation is here made to subdominant key. Root is 3rd below Bass, viz., D♭—this is dominant of new key, and further examination of the *quality* of the intervals of the chord proves it to be V^7*b* of G♭. Figure it $^{6}_{\flat 5}$.

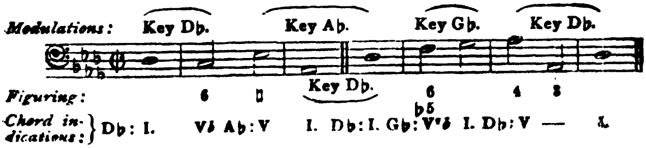
(*b*) Tonic chord of key G♭—no figuring. Quitted as subdominant chord of original key.

,, ,, 6. This bar obviously contains a 4 3 suspension in the Alto part; the D♭ being prepared in the previous bar, and resolved in this. [A♭ in the Treble part is a bye-tone.] Figure 4 3.

,, ,, 7. Tonic chord—no figuring.

Analysis of Harmony.

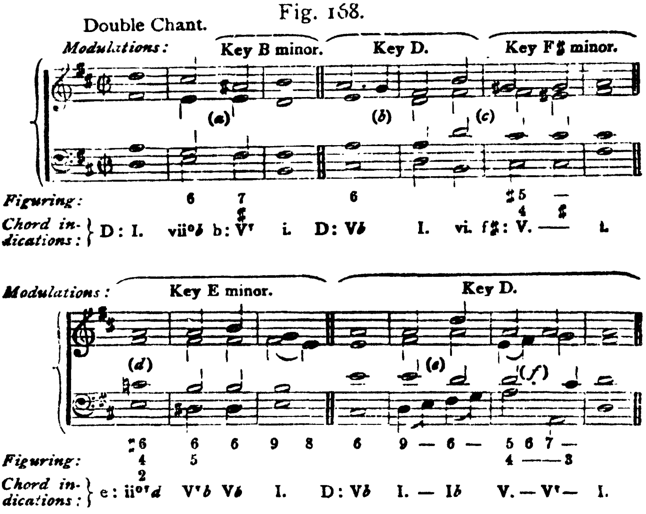
Here then is the figured Bass and modulation plan of Fig. 167 :—


Modulations : Key D♭. Key A♭. Key G♭. Key D♭.
Key D♭.
Figuring : 6 ♮ 6 ♭5 4 3
Chord indications : D♭: I. V*b* A♭: V I. D♭: I. G♭: V⁷*b* I. D♭: V — I.

It will be seen from this example that figuring the Bass of a given passage necessitates spelling the chords one by one; whilst the writing of the chord indications necessitates parsing the chords one by one.

The next example will illustrate how modulations are made to other attendant keys, and a few other points (not touched upon in the first example) will be explained.

Fig. 168.


Double Chant.
Modulations:
Key B minor.
Key D.
Key F♯ minor.
(a)
(b)
(c)
Figuring: 6 7 ♯ 6 ♯5 4 — ♯
Chord indications: D: I. vii°b b: V⁷ i. D: Vb I. vi. f♯: V. —— i.
Modulations:
Key E minor.
Key D.
(d)
(e)
(f)
Figuring: ♮6 4 2 6 5 6 9 8 6 9 — 6 — 5 6 7 — 4 —— 3
Chord indications: e: ii°⁷d V⁷b Vb I. D: Vb I. — Ib V. — V⁷— I.

Here the accidentals clearly indicate the modulations. A♯, the raised 5th, leads to B minor, the relative minor of the tonic; G♯ and E♯, the raised 4th and 2nd, lead to F♯ minor, the relative minor of the dominant (A): C♮ and D♯, the lowered 7th and raised 1st, lead to E minor, the relative minor of the subdominant G.

A few explanations are perhaps necessary with regard to the figuring of this example. At (*a*) the 3rd of V^7 requires an accidental; at (*b*) the passing-note (G) in the Treble may or may not be figured; at (*c*) the 5th which accompanies the 4 3 suspension needs figuring, because of the accidental; at (*d*) the $\substack{6\\4\\2}$ is not V^7d, because the 6th is ***minor***, and the 4th *perfect*. Hence this chord is the last inversion of a secondary 7th. At (*e*) we have passing-notes E G in the Bass (second and fourth crotchets). The 9th in the Tenor (E) is resolved as usual upon D; but this D is no

longer an 8ve to the Bass, because the Bass has moved away from the **root** (D) to the 3rd of the root (F♯): hence the figuring **9 — 6 —. At** (*f*) the **passing-note in the Alto (F♯) requires figuring, in order to show how the** 7th **is approached.** Notice how the **4** is ***continued*** **under the 7, and the 7 continued over the 3.**

CHAPTER XIII.

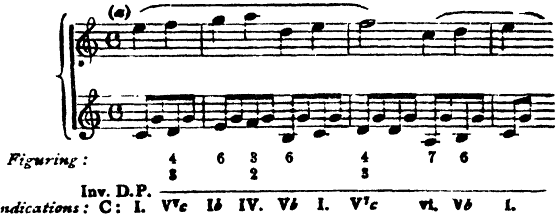
THE ANALYSIS OF PIANOFORTE MUSIC.

233. **Pianoforte students** very often have great difficulty in analyzing the harmonies in the pieces which they play, because the same chords *look* so different, when they are treated in an arpeggio or ***horizontal*** fashion, to what they appear in the apparently simpler harmonies of chants, hymn-tunes, and the like, in which the chords are set forth in a plain ***perpendicular*** manner.

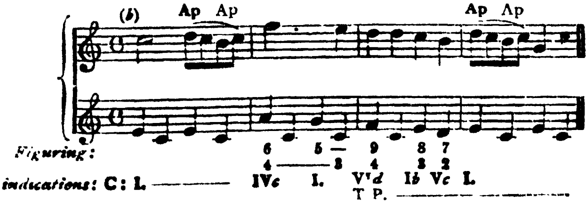
234. It will be well to remember that **pianoforte music** is generally written in a definite number of parts, two or more. A **principal part** is that which contains the chief melody, and so draws the attention of the ear especially to itself. An **accompanying part** is one which often has comparatively little individual melodic interest of its own, serving only as a mere accompaniment to a more important part.

Fig. 169.

SCHUMANN: *Children's Album, Op. 68.*


(a)
Figuring:
4 6 3 6 4 7 6
3 2 3
Inv. D.P.
Chord indications: C: I. V^{7}c Ib IV. Vb I. V^{7}c vi. Vb I.

DIABELLI: *From a Sonatina.*



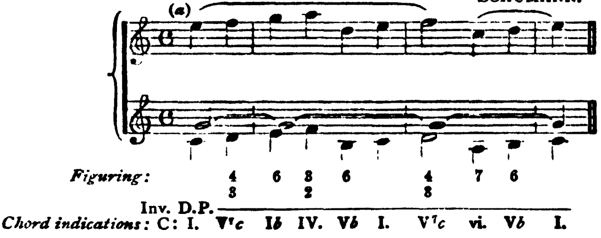
In each of the preceding examples (Fig. 169), the right hand is obviously playing the *principal* part, the left hand having merely an accompanying part assigned to it.

Each example appears to be written in two parts only, but the *effect* of the music is to sound like three parts, because the accompanying part is written in an arpeggio manner. "Perpendicular" effects are thus obtained by "horizontal" means.

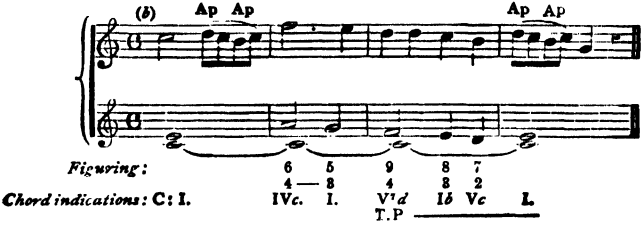
235. In analyzing any harmony written in an arpeggio manner, the first thing to do is to find the real Bass. As the Bass-note is always the lowest note of a perpendicular chord, so the lowest note of a horizontal arpeggio will likewise be the real Bass of the harmony. The Bass-note is not always the first or accented note in an arpeggio figure—as it is in Fig. 169 (*a*). Sometimes it comes later on in the arpeggio figure, as an unaccented note—as in Fig. 169 (*b*). But the Bass-note is always the lowest note of the arpeggio figure. The student will find his analytical work easier, if at the beginning he reduces any given passage to its simplest form. The two examples in Fig. 169 will then appear thus:—

Fig. 170.

SCHUMANN.



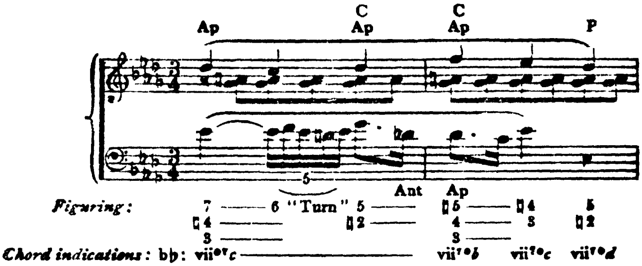
DIABELLI.



236. The difference between principal and accompanying parts is essentially a *relative* one; sometimes very perceptible, as in Fig. 169, but often so slight as almost to disappear. Thus, in Fig. 171, it is difficult to say which is *the* principal part, because the Treble and Bass both appear to have an equal claim to that distinction.

Fig. 171.

CHOPIN: *Polonaise, Op. 26.*

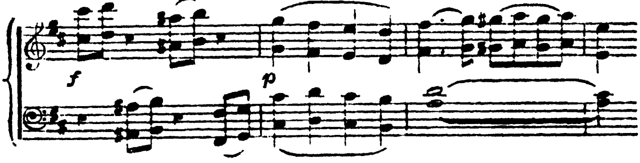

Ap
C Ap
C Ap
P
5
Ant
Ap
Figuring:
7 —— 6 "Turn" 5 —— ♮6 —— ♮4 6
♮4 —— ♮2 —— 4 —— 3 ♮2
3 —— 3 ——
Chord indications: b♭: vii°7c —— vii7°b vii7°c vii7°d

Observe that the harmony in Fig. 171 consists entirely of various inversions of *one chord only*—the "Diminished 7th"—ornamented by Appoggiaturas, Changing-notes, a Passing-note, a note of Anticipation, and a "Turn."

237. **One or more of the parts may for a time be doubled** an 8ve higher or lower in pitch:—

Fig. 172.

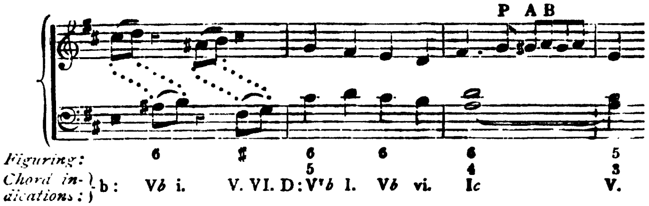
MOZART: *Sonata in D.*



Here, none of the music is in four parts, although at first sight it has this appearance. The first two bars are in two parts only, the Treble being doubled an 8ve higher in pitch, the Bass an 8ve lower. The third bar is in three parts, the top part being doubled an 8ve higher:—

Fig. 173.

The harmony in Fig. 172 reduced to its simplest form.

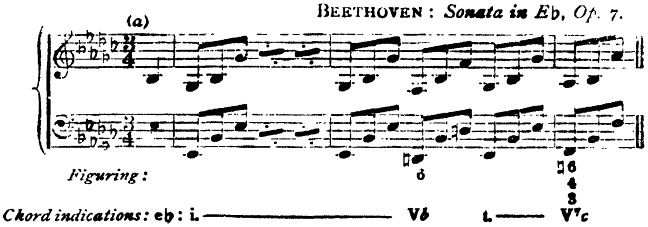

P A B
Figuring: 6 ♯ 6 5 6 6 4 5 3
Chord indications: b: Vb i. V. VI. D: V⁷b I. Vb vi. Ic V.

In bar 3, G is a Passing-note between F♯ and A; G♯ is an accented chromatic Auxiliary-note a semitone below the Bye-tone A.

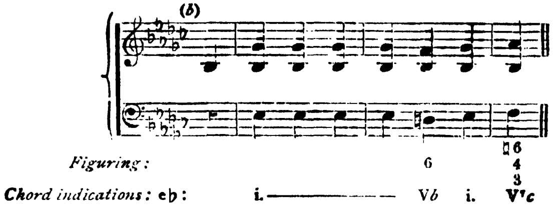
In the next example, the music *looks* as though it were in two parts only; it *sounds* as if it were in six parts. In reality, if we reduce it to its simplest form, it is seen to be in three parts, all of which are doubled:—

Fig. 174.

BEETHOVEN: *Sonata in E♭, Op. 7.*



Reduced to its simplest form.



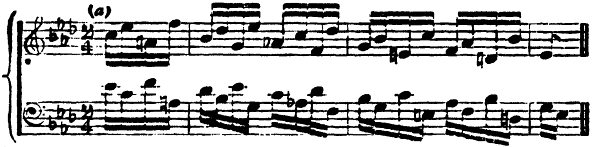
Observe that in the last chord of this extract the 3rd of the root (♮6th) from the Bass is omitted. See § 178, page 75. The repeated note in the middle of the harmony is *not an inverted pedal*. See § 222, page 96.

The next example *looks* as if it were written in two parts only; it *sounds* (and really is) in four parts, of which two are doubled :—

Fig. 175.

Descending Sequence.

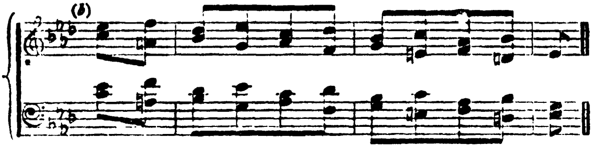
BEETHOVEN : *Sonata in A♭*, Op. 26.



Figuring: 6 6 6 6 6

Chord indications: E♭: vi. b♭: V*b* i. A♭: V*b* I. IV*b* vii° f: V*b* i. E♭: V*b* I.

Simplest form: *two* real parts.



Figuring: 6 6 6 6 6

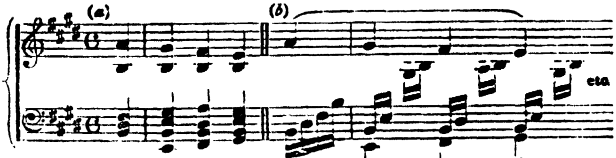
Chord indications: E♭: vi. b♭: V*b* i. A♭: V*b* I. IV*b* vii° f: V*b* i. E♭: V*b* I.

In Figs. 174 and 175 there is *no principal part*; all are of equal interest.

238. The individual notes of any arpeggio group of notes generally follow the same horizontal laws of part-progression which would be observed if the same harmonies were written in a succession of unbroken chords. Compare Fig. 176 (*a*) and (*b*) :—

Fig. 176.

MENDELSSOHN : *Lieder ohne Worte, No. 1.*

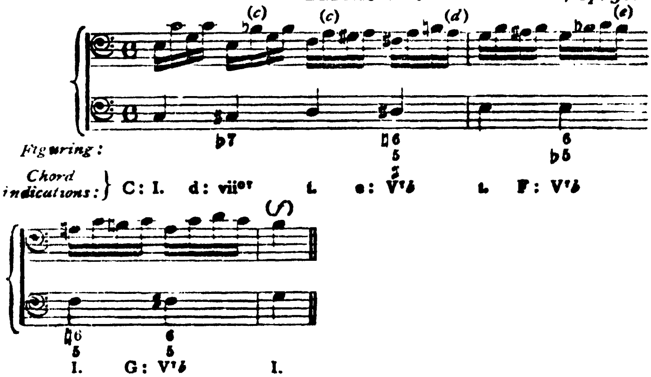


Figuring: 7 $^4_3$ 6 7 $^4_3$ 6

Chord indications: E: V^7 I. V^7c I*c* V^7 I. V^7c I*b*

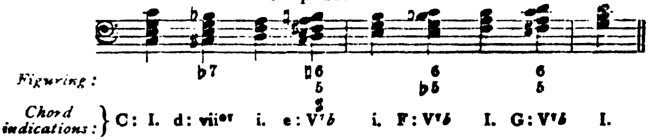
Fig. 176 (*continued*). Ascending Sequence.

BEETHOVEN: *Rondo Grazioso, Op. 51.*



According to this rule, the resolution—**if it does not immediately follow a discord**, as in Fig. 176, (*d*), (*e*), (*f*)—will be found in an arpeggio group in a corresponding place to that which the discord itself occupied in the previous group—see Fig. 176, (*c*), (*c*).

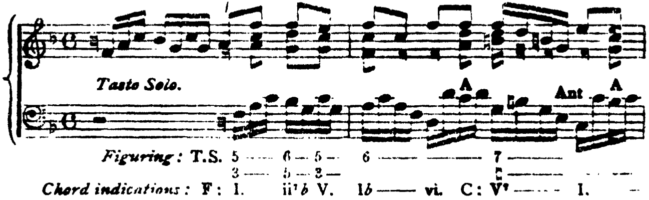
Simplified thus:—



239. The total number of parts in a composition is **not diminished** by the fact that one or more of them may be **temporarily silent**, *i.e.*, "resting" awhile:—

Fig. 177.

J. S. BACH: *Short Prelude in F, No. 9.*



Here, although the *entire* passage is in four parts, the top part begins alone without harmony (*Tasto Solo*), and in the second bar the two inner parts are intermittent in character, while the two outside parts are uninterruptedly continuous.

240. In listening to music, or in playing it on the pianoforte, although it is difficult to hear or think of the principal melody without at the same time observing or feeling the accompanying parts, yet we ought at least to *try* to direct our attention to the progression of each part by itself; and we should also endeavour, as far as possible, to perceive the relationship it bears not only to the principal melody, but to the other accompanying parts.

241. A moving part may be more easily **distinguished from another moving part,** played or sung with it, when :—

(i.) it has a *peculiar melodic outline* which separates it from the others (see Fig. 178); or when

(ii.) *it enters after the others,* or is intermittent—*i.e.*, with resting places—see the middle parts in Fig. 177; or when

(iii.) it moves in *quicker or slower notes* than the others (see Fig. 176); or when

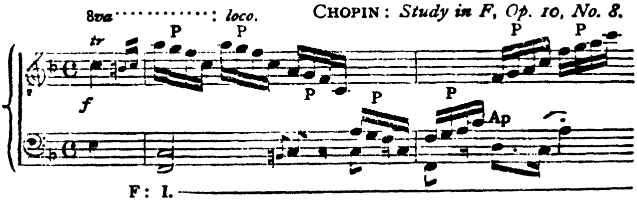
(iv.) its sounds are of a *different quality* to the others, as in a piece for violin and piano, or in a song with piano accompaniment.

It is only by a **gradual process of training** that the ear can be made to recognise and to distinguish several simultaneous parts interwoven into a complicated whole. Such training is, however, absolutely essential not only for teachers and performers, but for intelligent *listeners* as well.

242. **Arpeggio figures** frequently have **passing-notes** mixed with them :—

Fig. 178.

CHOPIN : *Study in F, Op. 10, No. 8.*

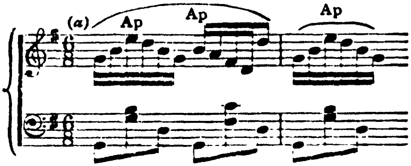


This is an example of a principal (arpeggio) part for the right hand, with a more or less defined under-current of melody for the left hand.

The following is an example of a principal melody consisting entirely of arpeggio figures in which **downward-resolving appoggiaturas** occur :—

Fig. 179.

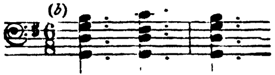
L. SCHYTTE: *Sonatina, Op. 122, No. 2.*



Figuring:
7 ——— 8 ———
5 ——— 5 ———
4 ——— 3 ———
2 ———

Chord indications: G: I. ——— V^7 ——— I. ———
T.P. ———

The left hand part can be thus simplified :—



Figuring
7 8
5 5
4 3
2

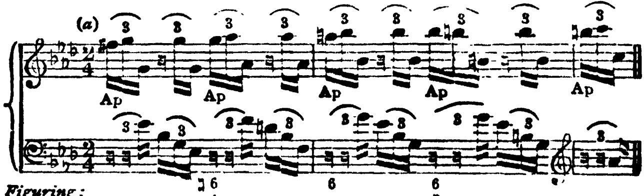
Chord indications: G: I. —— V^7 —— I.
T.P. ———

Observe that C, the discord which occurs in the middle of the second arpeggio group in the left hand, is resolved upon B, the middle note of the next group.

Upward-resolving appoggiaturas are also to be found mixed with arpeggio figures :—

Fig. 180.

BEETHOVEN: *Sonata in C minor, Op. 10, No. 1.*

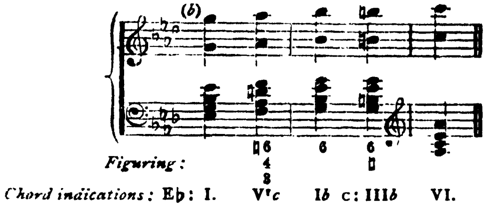


Figuring:
♮ 6 6 6
4 ♮
3

E♭:

Chord indications: I.— ——— V^7c ——— Ib c: III^7b ——— VI.

Reduced to its simplest form.

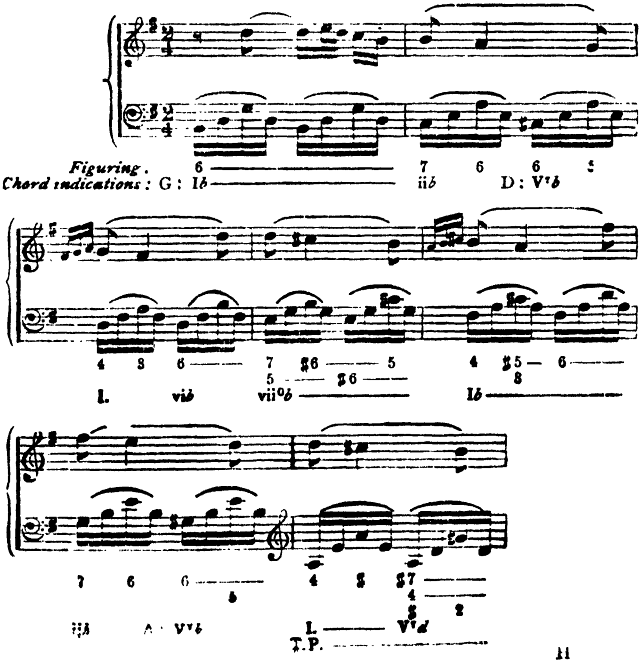


Here, it will be observed, the real Bass is to be found upon the very last note of the arpeggio figure; which *is* the Bass, because it is the lowest note of the horizontal *chord*.

Suspensions and Retardations are sometimes heard mixed with arpeggio figures :—

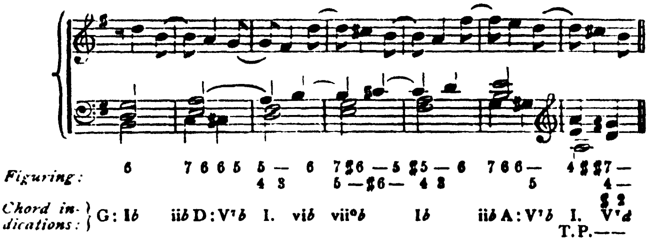
Fig. 181.

BEETHOVEN: *Sonata in G, Op. 14, No. 2.*



There is no difficulty here in distinguishing the principal from the accompanying part. But the retardations in the latter are not so easily recognised. They can be at once perceived, however, when the passage is reduced to its simplest form :—

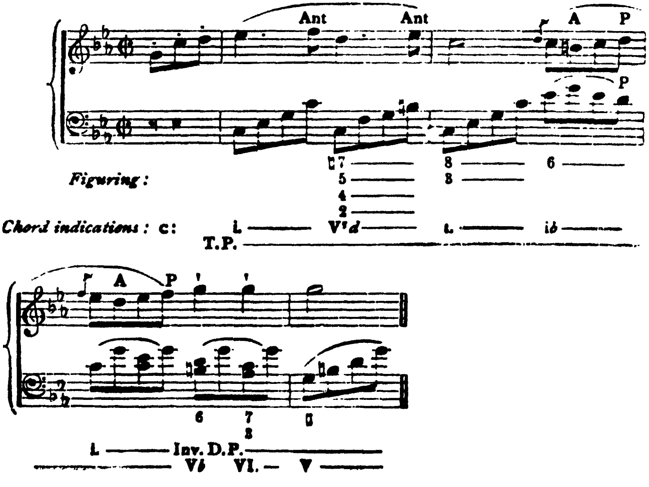
Fig. 182.



The passage is now seen to be quite an ordinary specimen of four-part harmony ; it will be observed that the suspensions in the top part are admirably accompanied by the retardations in the part next below the top. Even pedal notes (direct and inverted) sometimes find their way into arpeggio figures :—

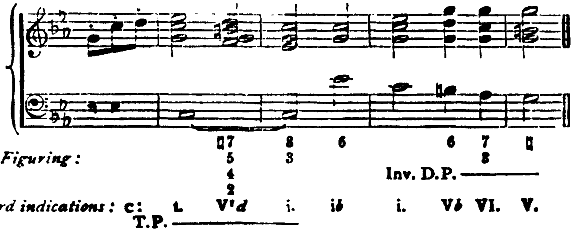
Fig. 183.

BEETHOVEN : *Sonata Pathetique*, *Op. 13.*



Here, too, there is no difficulty in distinguishing the principal from the accompanying parts. The two notes of anticipation are *irregular*, inasmuch as the notes of the next chord which they anticipate are not in the (principal) part in which they occur, but are in the accompanying parts. The pedal notes (tonic and dominant) will be more clearly seen when the passage is reduced to its simplest form:—

Fig. 184.



Hints for Practical Examination Candidates.

In analyzing pianoforte music—

Hint I.—Find the real Bass of the passage. This may be looked for (*a*) as the lowest note of a perpendicularly written *chord*, or (*b*) it may be the lowest note of a horizontally written *arpeggio.*

Hint II.—Play or write all the notes of an arpeggio group simultaneously in a perpendicular manner. In other words, reduce the passage to its simplest form, either mentally or on paper.

Hint III.—Figure and analyze any chord thus formed; spell it, to see what are its intervals as *reckoned from the Bass*; **parse** it, to see whether it is direct or inverted, and to discover what is *its position in the key*, and how it is related to the chords which precede and follow it.

Hint IV.—Find out which are the **essential notes** of the chord, and see if the chord be consonant or dissonant. If the latter, see how and where it is **resolved.**

Hint V.—Find out which are the **unessential notes** (if any), and classify these under their respective headings—suspensions, retardations, appoggiaturas, auxiliary-notes, passing-notes, changing-notes, anticipations, pedals, etc.

Hint VI.—Find out any modulation which may present itself. See into what key the music modulates, and be able to put your finger upon the exact chord where the modulation takes place

Final Hints for Examinations.

In the Examinations for the Intermediate Divisions, the Examiners will pay special attention to:—

Correct spelling.

Accuracy of notation, including—

Correct position of stems with respect to the notes.

Proper order and position of sharps and flats in key-signatures.

Due insertion of necessary accidentals, ties, slurs, etc.

Grouping of quavers and shorter notes.

All transposed phrases must be given complete, with correct key and time-signatures. Marks will be deducted for all unnecessary figures, etc., in figuring the Bass of the given example of Harmony.

Following are Specimen Examination papers for the Advanced Intermediate Division:—

Time allowed—Three hours.

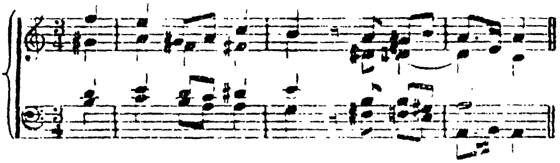
Marks required for Pass Certificate, 65.

" " " Honours " 80.

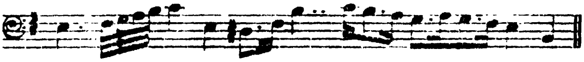
Specimen Examination Paper.

ADVANCED INTERMEDIATE DIVISION.

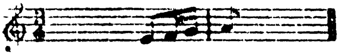
1. (15 **marks.**) Transpose this music **down a major third,** using **the** signature of F minor. Write it in Open Score, using the C clef for the Alto and Tenor parts :—



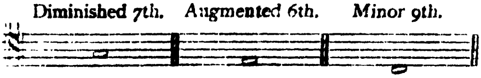
2. (10 **marks.**) (*a*) Add the time-signature and bars to the following melody :—



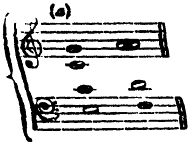
(*b*) Add the rests necessary to complete these two bars :—

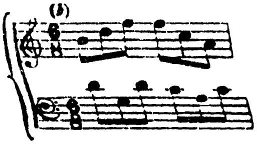


3. (15 marks.) Above the given notes write the intervals specified, and state in what keys these intervals may be found :—



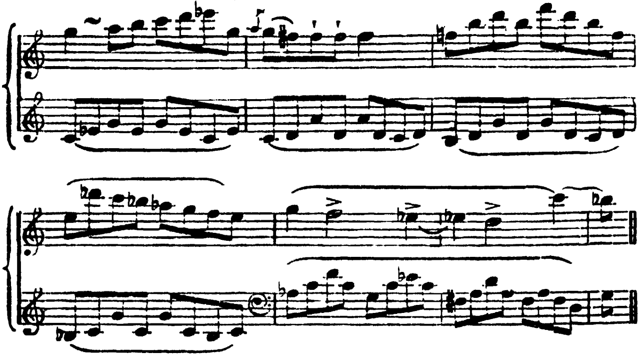
4. (10 **marks.**) (*a*) *Indicate any faults you may find in the* following progression. (*b*) Write these arpeggio figures as chords :—



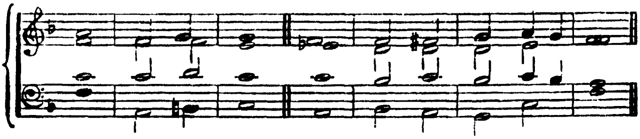


5. (15 marks.) Simplify the left-hand part of the following passage, writing it in sustained chords, giving the chord-indication to each harmony. Mark Passing-notes in the right-hand part with a letter P, Appoggiaturas with A, and

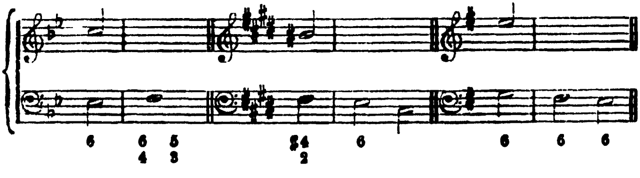
Suspensions with S. State the keys through which the music passes :—



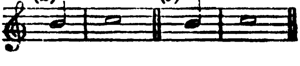
6. (10 marks.) Give the proper **chord-indication** below each Bass note of the following Chant, and state the keys into which the music modulates :—



7. (15 marks.) Add Treble, Alto, and Tenor parts, according to the figuring, using the first Treble note given in each case :—



8. (10 marks.) Harmonize these notes (*a*) as a perfect cadence in the key of A minor, and (*b*) as an interrupted cadence in the key of C minor :—



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